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MILITARY RIFLE SHOOTING

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MILITARY RIFLE SHOOTING

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MILITARY RIFLES

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MILITARY RIFLE SHOOTING

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MILITARY RIFLE SHOOTING

Military rifle shooting, as practised out-of-doors in the United States, is usually at ranges from 100 to 800 yards. The recruit or beginner is the only one required to shoot at 100 yards; most of the rifle practice, therefore, is from 200 to 800 yards where the U.S. Springfield rifle is used. Where the U.S. magazine rifle is used the range is extended to 1000 yards.

U.S. ARMY REGULATIONS

Rifle practice in the United States Army is governed by the manual, "Firing Regulations for Small Arms for the United States Army, 1898," and are as follows: —

The recruit is first put through a course of preliminary drills, which includes explanations of the different theoretical principles of rifle firing, and exercises in estimating distances. After this comes the field practice, first firing at known distances on rectangular targets; then, as skirmishers, at the figure targets; and company volley firing.

The next season is practice season. First is prescribed a course of preliminary drills, gallery practice and further instructions in estimating distances. Then follows range practice, which for individual firing is divided into three classes: —

The Recruit Class, which embraces all those enlisted men who have not had the benefit of instruction in range practice in

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any previous season, or who in their last season's practice failed to qualify higher than the second class.

The Second Season Class, which embraces all those who in their last season's practice qualified as marksmen or first-class men.

The Subsequent Season Class, which embraces all those who in their last season's practice qualified as sharpshooters.

Record practice is shot in scores of five shots each, without sighting shots.

Preliminary practice precedes record practice, provisions for which are: —

For the Recruit Class, preliminary practice consists in firing ten shots at each of the ranges, 100, 200, 300, 500 and 600 yards.

For the Second Season Class, preliminary practice consists in firing ten shots at each of the ranges, 200, 300, 500 and 600 yards.

For the Subsequent Season Class, preliminary practice consists in firing five shots at each of the ranges, 200, 300, 500 and 600 yards.

Any soldier advanced to firing at 800 and 1000 yards, fires ten shots in preliminary practice at each of these ranges.

In each class the soldier must complete his prescribed preliminary and record practice at each range before commencing his preliminary practice at the next longer range.

From this firing and that in skirmish practice the general proficiency of the soldier is judged and his classification determined.

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The record practice for Recruit and Second Season classes consists in firing twenty shots at each of the ranges, 200, 300, 500, 600 yards.

The record practice for the Subsequent Season Class consists in firing ten shots at each of the ranges, 200, 300, 500 and 600 yards.

If, in the practice prescribed, any officer or soldier attains a percentage of 70 firing with the rifle, or 68 firing with the carbine, of the possible total score, he is advanced to practice at 800 yards, firing at this range twenty shots if in the Recruit or Second Season Class, and ten shots if in the Subsequent Season Class.

If, in his practice at the 200, 300, 500, 600 and 800 yard ranges, any officer or soldier attains a percentage of 70 firing with the rifle, or 67 firing with the carbine, of the possible total score, he will be advanced to practice at 1000 yards, firing at this range twenty shots if in the Recruit or Second Season Class, and ten shots if in the Subsequent Season Class.

At the conclusion of firing at rectangular targets, members of the company are exercised in skirmish firing; after this, company volley firing follows. Practice at disappearing and moving targets follows the completion of record firing. Firing at running targets commences at 50 yards; later the range is extended to 100 yards. After the foregoing, company field practice and combined field practice follows.

A Sharpshooter is one who, in firing with the rifle the prescribed number of shots in record practice at the rectangular targets at 200, 300, 500, 600, 800 and 1000 yards, together with his score in skirmish firing, shall make 70 per cent of the possible aggregate score, or in firing with the carbine as above, shall make 67 per cent of the possible aggregate score.

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A Marksman is one who, in firing with the rifle the prescribed number of shots in record practice at rectangular targets, at 200, 300, 500, 600 and 800 yards, together with his score in skirmish firing, shall make 64 per cent of the possible aggregate score, or in firing with the carbine as above, shall make 62 per cent of possible aggregate score.

A First Class man is one who, in firing with the rifle the prescribed number of shots in record practice at rectangular targets, at 200, 300, 500 and 600 yards, together with his score in skirmish firing, shall make 54 per cent of the possible aggregate score, or in firing with the carbine, as above, shall make 53 per cent.

A Second Class man is one who, in firing with the rifle the prescribed number of shots in record practice at rectangular targets, at 200, 300, 500 and 600 yards, together with his score in skirmish firing, shall make 44 per cent of the possible aggregate score, or in firing with the carbine as above, shall make 43 per cent.

U.S. NAVY REGULATIONS

The regulations for target practice in the United States Navy are divided into practice with great guns and practice with small arms. Regulations for the latter provide:—

Small-arm target firing shall, when practicable, take place at least once each quarter.

The entry in the proper column of the conduct book, enlistment record, and continuous service certificate shall be based upon the result of this firing and shall be a 5, 4.5, 4 or 3.5, according to whether the man is a first, second, third or fourth-class marksman. Men not thus classified shall receive such mark as the commanding

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officer may direct, but if no firing of the kind hereafter described is conducted in any quarter, the mark for the previous quarter shall be carried along in it. If firing has taken place, an "F" shall be entered after the mark, and if the firing has not taken place the mark without the "F" shall be entered.

REGULAR AND TRAINING CRUISING SHIPS

The classification in these shall be subject to the following rules: —

1. No person can classify unless he knows how to take care of and use the service rifle and revolver.

2. The record firing shall consist of 10 consecutive shots with the service rifle, and with an artificial rest if desired, fired within a period of five minutes, at a "B" army regulation target, at a distance of 300 yards; and of 6 shots with the service revolver and without artificial rest, fired within a period of one and one-half minutes, at an "A" army regulation target, at 30 yard range. The score made shall consist of the number of points made with the rifle and revolver, the values assigned to the shots being those usual on army targets; thus the maximum will be (10 plus 6) 5 equals 80. The target and firer shall preferably both be on shore, but either target or firer or both may be afloat if necessary.

3. To reach first-class, a score of 60 shall be required; to reach second-class, a score of 48 shall be required; to reach third class a score of 36 shall be required; to reach fourth-class, a score of 25 shall be required.

Commanding officers are authorized to award prizes as follows to any enlisted man under their command: —

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There shall be two classes of prizes; namely, a first prize of $10, and a second prize of $5. For every 25 men who take part in the quarterly target firing, the commanding officer may award one first prize and one second prize, provided that the prizes shall be awarded to the men who stand highest of all those competing in the target firing, and provided that no first prize shall be awarded to any but a marksman of the first-class, and that no second prize shall be awarded to any but a marksman of the first or second-class. Attention is invited to the fact that commanding officers are not required to award any prizes as the result of target firing, but may do so, and it is recommended that the awards shall be made only where there is reason to believe that, by so doing, a spirit of emulation is created which will lead the men to put forth their best efforts. In order to further promote this end, commanding officers shall encourage and facilitate voluntary practice with rifle and revolver.

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VOLUNTEER MILITIA

Rifle practice among the volunteer militia of the United States is regulated by each State separately. There was an inclination on the part of the volunteers to follow the course prescribed for the U.S. Army until the Army discontinued the targets having elliptical bullseyes. The preference among the volunteers is for either a circular or an elliptical bullseye. The Army regulations form the basis of rifle practice in most of the States. In response to a request for information as to the system of rifle practice followed among the volunteers of the different States of this country the following information has been received: —

ARIZONA

Follows U.S. Army Regulations as modified by Col. James M. Rice for the National Guard. Have no regular encampment, but have competitive team shoots, 6 men to a team, at 200 and 500 yards, 10 shots at each distance for each man.

ARKANSAS

Follows U.S. Army Regulations.

CALIFORNIA

The firing regulations for small arms governing the U.S. Army will govern target practice, except where provided otherwise.

The provisions of the army regulations relating to skirmish firing, company volley firing, practice at disappearing and moving targets

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and field practice, will not be held to apply at the present time; and until such time as it may be possible to comply with them, skirmish firing will be held under such special regulations as may be from time to time adopted.

Those directions in the army regulations which apply solely to the U.S. magazine rifle or carbine will not be held to apply; where such directions occur, the provisions of "Blunt's Small Arms Firing Regulations" relating to Springfield rifle or carbine, caliber .45, will govern.

The practice season shall be at such time and of such duration in each year as the Commander-in-Chief may designate.

No arms except those issued by the State shall be used at any regularly authorized practice. All ammunition shall either be furnished by the State, or shall be of such a standard as may be designated.

Officers of companies, troops, batteries, signal corps and divisions will practice with the arm of their commands. General, field and staff officers will practice with revolvers. Non-commissioned staff officers and band musicians may practice with either rifle or revolver, at the discretion of their commanding officer.

Each officer and enlisted man firing with the rifle will be allowed annually 65 rounds of ammunition, and the same will be fired as follows: —

At rectangular targets: One score of 5 shots at each of the 200, 300 and 500 yard ranges, at first practice; One score of 5 shots at each of the 200, 300 and 500 yard ranges at second practice; One score of 5 shots at each of the 200, 300 and 500 yard ranges, at third practice.

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The positions for firing at each practice shall be as follows: Two hundred yards — 3 shots standing; 2 shots kneeling or sitting; Three hundred yards — 2 shots kneeling or sitting; 3 shots prone; Five hundred yards — 5 shots prone.

The above number of shots, fired as designated, will constitute the record practice.

At skirmish targets: A total of 20 shots in the manner designated, for the purpose of instruction.

Each officer and enlisted man firing with the revolver will be allowed annually 40 rounds of ammunition, and the same will be fired as follows: —

One score of 10 shots at each of four practices at the 50-yard range, which will constitute the record practice. Mounted practice for cavalry will not be required.

A "distinguished marksman" is one who makes a total annual score at the three ranges of 200.

A "sharpshooter" is one who makes a total annual score at the three ranges of 190.

A "rifleman" is one who makes a total annual score at the three ranges of 160.

A "marksman" is one who makes a total annual score at the three ranges of 130.

Paragraph 11 is amended to read as follows: —

11. The classification for those firing with the revolver shall be as follows: —

A "first class man" is one who, in firing the prescribed number of shots, makes 96 per cent of the possible aggregate score.

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A "second class man" is one who, in firing the prescribed number of shots, makes 92 per cent of the possible aggregate score.

A "third class man" is one who, in firing the prescribed number of shots, makes 85 per cent of the possible aggregate score.

A "fourth class man" is one who, in firing the prescribed number of shots, makes 76 per cent of the possible aggregate score.

COLORADO.

The target season, except for ranges above 500 yards, will open May 1 and close July 30.

The Firing Regulations for Small Arms for the U.S. Army are adopted as a guide for season's work, except as they may be modified.

Instruction in sight drilling and in position and aiming drills will be given until May 15. Gallery practice with reduced charges will be held until June 15. Range shooting at rectangular targets will be taken up June 15, and continued until the close of the season.

Only those who made in record practice at 200 yards, a total of 36 or over will be advanced to firing at 300 yards, and only those who in like manner make at 300 yards a total of 34 or over, will be advanced to firing at 500 yards.

The record firing in each position will follow the preliminary firing in that position before any other firing is held, and subsequent scores shall not be taken in lieu thereof.

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Additional practice may be held after the preliminary and record firing is completed, but shall under no circumstances form any part of the soldier's record.

All those officers and men who by the close of the season have made a total of 110 or over, in record practice at rectangular targets, may take part in the final target practice under such rules and regulations as may be subsequently published from these headquarters.

Company commanders are urged to report promptly at the close of the season the men eligible for the final practice.

All those who in record practice have a total of 110 out of a possible 150 at 200 yards shall be known as "First Class Men." (*b*) Sharpshooters and marksmen shall be rated as in paragraphs 446 and 447, Firing Regulations, U.S. Army. (*c*) Insignia for sharpshooters and marksmen will be furnished by the State to those who qualify in these classes, and such insignia will become the property of the holders.

CONNECTICUT

Target practice required in the Connecticut National Guard will be at 200 and 500 yards only.

For instruction the Company Commanders, with the approval of the Regimental Inspector of Small Arms Practice, may cause his men to shoot at other ranges whenever necessary.

Scores will consist of 5 shots. No sighting shots allowed.

All record scores must be made on targets issued by the Quartermaster-General.

Positions as prescribed in paragraphs 225, 227 and 238, Small Arms Firing Regulations. (Blunt.)

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All scores for record must be made in the presence of the Inspector of Small Arms Practice at Spring parade, or on a date assigned by the Regimental Commandant, which shall be near the close of the season.

No scores made with *reloaded cartridges;* or with cartridges other than those issued by, or purchased through the Quartermaster-General will be certified to or reported.

A score of 15, or more, at 200 yards, shall qualify the shooter as a marksman, without regard to what his score at 500 yards may be.

A score of 15, or more, at 200 yards, and 15, or more, at 500 yards, shall qualify the shooter as a first-class marksman; *but* a total of 30 at the two ranges shall not so qualify the shooter, if he has fallen below 15 at either range.

A score of 20, or more, at 200 yards, *and* 20, or more, at 500 yards, shall qualify the shooter as a sharpshooter; *but* a total of 40 at the two ranges shall not so qualify the shooter, if the score at either range is less than 20.

At close of season the Inspector of Small Arms Practice, witnessing the scores, will report to the Adjt.-General *direct* on or before December 1 of each year, on blank form No. 51, A.-G. O.: —

1st. All members shooting.

2d. All members practicing and failing to qualify as marksmen.

3d. All marksmen.

4th. All first-class marksmen.

5th. All sharpshooters.

Each officer and enlisted man in the Connecticut National Guard will be allowed 50 cartridges each year, and for extra practice,

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cartridges may be purchased through the Quartermaster-General, at cost price, in lots of 1000.

The seasons for rifle practice will commence on the 1st day of May, and end on the 31st day of October of each year.

DELAWARE

Follows Blunt's Firing Regulations modified. Practice season, June 1 to October 31. General practice commences with class firing, beginning with the third at 100 yards, and continuing through the classes by those who qualify. Those failing to qualify will not be advanced to practice in a higher class until they shall have qualified in a lower one. Should time allow, in order to encourage qualifications, the officer in command may, at his discretion, allow retrials at each distance to those failing to qualify. As soon as a man qualifies at 200 yards in class practice, making 15 or better in 5 shots, he will thereafter during the season practice at this distance in 10 shot scores for the degree of Marksman or Sharpshooter. After qualifying at 500 yards in class practice, making 15 points or better in 5 shots, he will for the remainder of the season practice at this distance in 10 shot scores for the degree of Marksman or Sharpshooter.

Qualification.— The Fourth Class will consist of all officers and men who do not appear on a range for practice. The Third Class will consist of all who score 18 points at 100 yards. The Second Class of all who score 15 points at 200 yards. The First Class of all who score 15 points at 500 yards. Five shots only at each distance and no sighting shots. Position at 100 and 200 yards,

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standing, at 500 yards prone. Target at 100 and 200 yards third class, at 500 yards second class. Those who score 70 and upwards will constitute the class of Marksmen and be entitled to a Marksman's badge. Those who score 85 and upwards will constitute the class of Sharpshooters and will be entitled to wear a silver bar. Those qualifying in the two latter classes will have their names recorded upon a classified roll of State Sharpshooters and Marksmen.

FLORIDA

Follows Blunt's Manual. Shoot on targets supplied by the U.S. Ordnance Department.

GEORGIA

The aggregate required for qualification in the Georgia State Troops are as follows: First, for qualification as an expert sharpshooter, an aggregate in regular practice at the known distances, 200, 300, 500 and 600 yards, and in regular skirmish, with the rifle 145 and with the carbine 138. Second, for the Sharpshooter's class, an aggregate in regular practice at the known distances, 200, 300 and 500 yards, and regular skirmish practice of 120 with the rifle and 113 with the carbine. Third, for the marksman's class, an aggregate in regular practice at the known distances, 200, 300, 500 and 600 yards, and in regular skirmish

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practice with the rifle 90 and with the carbine 80. Fourth, for the first class, an aggregate with the rifle of 75 and with the carbine 70. Fifth, for the second class, an aggregate with the rifle 57 and with the carbine 55. Sixth, the third class is composed of those who have practiced and failed to make an aggregate qualifying them for the second class or higher. Seventh, the fourth class is composed of all the remaining members of the organization borne on its rolls at any time during the practice season. Eighth, the regular practice consists of five shots at 200 yards, standing without rest or use of a strap; five shots at 300 yards, kneeling or sitting; ten shots at 500 yards, position prone, head toward target. No sighting shots are allowed at 200 or 300 yards, two sighting shots (which must be announced before shooting) allowed at 500 and 600 yards; five shots at 600 yards, position same as at 500 yards.

The skirmish practice is 10 shots at regular groups of 3 regulation skirmish figures, kneeling, standing and prone; skirmishers forming in line a little in the rear of 600 yards firing point are advanced alternately at quick and double time, halted at unknown distances, 30 seconds interval between first note of the "Commence Firing" and last note of the "Cease Firing," 5 halts advancing and 5 retreating. One shot must be fired in the interval at each halt, but not more than one, 5 points deducted for firing before the signal "Commence Firing," or after the signal "Cease Firing," or for failure to fire at each halt or for firing more than one shot at each halt. Skirmishers are advanced to about 200 yards and then are retreated to about 600 yards. Use at known distances elliptical

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bullseyes, targets A and B, and for skirmish the silhouette, standing, kneeling and prone, such as are used by the U.S. Army. The full system of this State is given in a book entitled "Small Arms Firing Regulations for Georgia."

IDAHO

Follows U.S. Army Regulation.

ILLINOIS

Follows Rice's modifications of Blunt's Regulations for Small Arms Practice. Amount of ammunition issued to each officer and enlisted man as follows: General practice, for all who have not qualified as sharpshooters, 133 rounds for each day's firing, total number of rounds for the season not to exceed 400; Advance practice, for all who have qualified as sharpshooters in any previous season 166 rounds for each day's firing, total number of rounds for the season not to exceed 500; Distinguished Sharpshooters, for practice or record, total number of rounds for the season not to exceed 500; Advance practice, record shooting, total number of rounds for the season not to exceed 500. Practice season, June 1 to October 31.

A score at either of the known distances always ends with the fifth shot. A score at unknown distance, or skirmishing, consists of 10 shots, making a possible 50. No sighting shots allowed at 100, 200 and 300 yards. The shooter will not advance beyond the 300 yard range until he has made a total of 30 points at the 100, 200 and 300 yard ranges. Will not advance beyond 500 yard range until he has made a total of 50 points. Will not advance

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beyond the skirmish unless he has made a total of 80 at 100, 200 and 300 yards, or a total of 80 at 100, 200, 300 and 500 yards and skirmish ranges.

INDIANA

Follows U.S. Army Regulations.

IOWA

Follows Small Arms Firing Regulations of the U.S. Army, except that the insignia issued for the State qualifications are of bronze, instead of silver or white metal as used by the Army, it being essential that the U.S. insignia when worn by a Guardsman in Iowa be earned in the same manner as in the U.S. service. The State insignia being of the same pattern, but of different material, is thus not confounded by the observer with that which requires more work to earn. Practice season, from April 1 to November 30, inclusive.

The State record course will consist of 2 scores of 5 shots each at each of the ranges, 200, 300 and 500 yards. The Springfield rifle, caliber .45, as issued by the State, with a trigger pull of not less than 6 pounds, will be used for all record firing.

Qualification. — The qualification under State rules will be as follows: Those having an aggregate of 120 points, Sharpshooters; 96 points, Marksmen; 81 points, First Class; 66 points, Second Class: less than 66 points, Third Class; men not firing, Fourth Class. Soldiers qualifying as Sharpshooters or Marksmen under State rules will be encouraged to try to qualify under the Army rules

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for the recruit class. The aggregate required in this firing for the rifle is 560 for a Sharpshooter and 448 for a Marksman. Only these two grades will be classified under Army rules. Soldiers who have qualified as Sharpshooters or Marksmen under Army rules will not be required to shoot thereafter, and will be reported and credited in their respective classes so long as they remain in the service. Where the qualification was in a previous season only, the total score and the year it was made will be given on the report and on the lists. If the course laid down for the subsequent season class is followed the aggregates required are one-half of the above, or 280 for a Sharpshooter and 224 for a Marksman.

KANSAS

Practice season, May 15 to November 30. Follows Small Arms Practice for National Guard by Col. James M. Rice. Maximum allowance of fixed ammunition 5000 rounds for a company.

The following State medals are competed for: A gold medal to the company making the highest company average; a silver medal to the company making the second highest company average; a gold medal to the company having the highest average of attendance at target practice; a silver medal to the company having the second highest percentage of attendance at target practice. (In computing attendance only those will be counted present who have fired at three ranges.) A gold medal will be given the

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member of the Kansas National Guard making the highest individual record during the season; a silver medal to the member making the second highest individual record during the season.

KENTUCKY

Follows U.S. Army Regulations.

LOUISIANA

Follows U.S. Army Regulations.

MAINE

The commanding officer of any company may qualify his men at any time during the season and in such numbers as he may find convenient. Each man shall have one attempt to qualify in the class to which his preliminary scores entitle him. Such attempt at qualification will be made in the presence of a commissioned officer who will observe the scoring carefully and certify that the scores were made as returned. This officer may be of the company whose men are attempting qualification, or from another organization. He will see that the rules in regard to qualification practice are strictly observed and his ruling in regard to any controversy will be obeyed. At the conclusion of the day's practice the officer will make the required certification on the blank provided for the purpose.

All preliminary and qualification practice will be conducted on the elliptical target in accordance with the provisions of the Regulations for the National Guard. The classes for the rifle will be as follows: —

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Sharpshooters.— Preliminary practice scores must be two scores of 22 at 200 yards, two scores of 23 at 300 or 500 yards, and two scores of 22 at 300 or 600 yards.

First-Class Marksmen.— Preliminary practice scores must be two scores of 21 each at 200 and 500 yards, or 200 and 300 yards.

Marksmen.— Members of the Guard who have had any preliminary practice upon the range during the season may practice for qualification in that class.

Qualification scores will be made as follows: —

Those who have sharpshooters' scores in preliminary practice will have ten shots over each range, and if they make 105 points in the aggregate they are sharpshooters; making 120, they are distinguished sharpshooters.

Those who have first-class marksmen's scores in preliminary practice, will have ten shots over the two ranges, and if they make 60 points in the aggregate they are first-class marksmen.

Members of the Guard whose preliminary scores will not permit them to practice in either of the foregoing classes, but who have had preliminary practice on the range during the season, will have ten shots at 200 yards, and if they make 26 points they will be classed as marksmen.

Those practicing for sharpshooters or first-class marksmen and failing to qualify as such will be entered in that class to which their scores entitle them.

Carbine and revolver practice will be governed by the same general rules as rifle shooting, with such necessary preliminary and qualification scores as are prescribed by the Regulations.

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The commissioned officer in command of the qualification practice will see that all due precautions against danger are taken.

No sighting shots will be allowed at any of the ranges.

The markers in deciding doubtful hits will give careful attention as to whether the edge of the bull's eye or lines are touched by the bullet, and if so the shots shall be counted as having hit the bull's eye or lines and give it the larger score accordingly. The marker will be careful to give the proper signal showing the value of the shot, being particular that the center of the marking disk is placed as near as it can conveniently be over the bullet hole in the target.

After a shot has been scored there can be no change made in the score, unless the officer in attendance has good reason to know that an error has been made in marking.

Ricochet shots will be scored as "misses."

No two competitors shall shoot with the same rifle, nor shall a rifle be changed after a score has been commenced, unless the rifle has been disabled by accident.

If the practice is over more than one range, the shortest will be used first and the longest last.

No coaching will be permitted nor shall the officer in charge allow any person other than himself, the scorer and the competitors, nearer than ten yards of the firing point, nor shall any one be permitted to interfere in any way with the competitors, give advice as to anything pertaining to the shooting, or disturb the competitors by loud talk while the men are at the firing point.

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If for any cause the target is removed just as a competitor fires, he shall be given another shot, but no other claim will be considered for giving another shot when one has been made.

Only one attempt at qualification for each member of a company will be allowed during the season.

The officer in charge may test the pull of any rifle, and it shall be his duty so to do if asked or if he has reason to think that it is below six pounds, and he shall not allow any soldier to use any rifle the pull of which is less than six pounds.

The regulations of the National Guard, or Blunt's Small Arms Firing Regulations, will govern in any case not herein specified.

The Signal Corps and Naval Reserve will be governed by the same rules as herein laid down for Company organizations.

MASSACHUSETTS

The Shooting Season will close on November 1.

The arms used in practice and competition will be those issued or adopted by the State, without alteration, except that the blades of the front sight may be made thicker or higher to allow for difference in eyesight of error in elevation.

Minimum trigger pull of rifles and carbines will be 6 pounds, and of revolver, 4 pounds.

Either United States Army elliptical or the Creedmoor target may be used in making qualifications, but the United States

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Army elliptical must be used in competitions. Qualification scores for troops armed with the rifle are as follows: —

	200 YARDS	500 YARDS	600 YARDS
Expert Marksman . .	2 scores of 46	2 scores of 47	2 scores of 45
Sharpshooters . . .	2 scores of 22	2 scores of 23	2 scores of 21
First Class Marksmen .	2 scores of 21	2 scores of 21	
Second Class Marksmen .	2 scores of 18		
Third Class Marksmen .	2 scores of 15		

For troops armed with the carbine: —

	200 YARDS	500 YARDS	600 YARDS
Expert Marksmen . .	2 scores of 44	2 scores of 45	2 scores of 43
Sharpshooters . . .	2 scores of 21	2 scores of 22	2 scores of 20
First Class Marksmen .	2 scores of 20	2 scores of 20	
Second Class Marksmen .	2 scores of 17		
Third Class Marksmen .	2 scores of 14		

Scores for experts will consist of 10 consecutive shots, with a possible total of 50 points. For other classes, of 5 consecutive shots, with a possible total of 25 points.

Positions as prescribed in "Blunt's Small Arms Firing Regulations": —

At 200 yards (Par. 227)
At 500 and 600 yards (Par. 238)

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For revolver qualifications: —

	50 YARDS
First Class Marksmen	2 scores of 28
Second Class Marksmen	2 scores of 25

Scores will consist of 6 consecutive shots, with a possible total of 30.

Position, standing, arm extended, elbow free from body. Target, that used for rifle shooting at 200 yards.

Distinguished marksmen are sharpshooters on whom the honorary distinction has been conferred for marked ability, and marksmen of this grade will conform to the requirements of either the expert or the sharpshooter class.

Badges will be given for qualifications, and bars for requalifications. Not more than six badges for rifle shooting and one for revolver shooting can be worn on State duty.

MICHIGAN

This State uses the Lee Remington rifle .30 caliber.

Follows Blunt's Small Arms Practice and the amendments from time to time by the U.S. Army.

A soldier desiring to make a *record score* must announce it before commencing to shoot, otherwise it will not be so counted. The following are the number of shots to be fired in a *record score* at the several ranges: At 200 yards 5 shots kneeling or sitting; 5 shots standing. At 300 yards 5 shots prone; 5 shots kneeling or sitting. At 500 yards and 600 yards the same as at 300 yards. At 800 yards and 1000 yards 10 shots prone.

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Failing to make at least 40 per cent of the possible score at any one of the ranges, may in the discretion of the officer in charge of the range disqualify the soldier from continuing his *record score*.

A marksman is one who in firing with the rifle the prescribed number of shots in *record practice* at rectangular targets, at 200, 300, 500, 600 and 800 yards, together with his score in skirmish firing, shall make 64 per cent of the possible aggregate score.

A sharpshooter is one who in firing with the rifle the prescribed number of shots in *record practice* at the rectangular targets, at 200, 300, 500, 600, 800 and 1000 yards, together with his score in skirmish firing, shall make 70 per cent of the possible aggregate score.

MINNESOTA

Follows Small Arms Firing Regulations of the United States Army. Use rifle targets A and B. Practice season June 1 to October 31.

Qualification.— Distinguished Riflemen, Sharpshooters, Marksmen and First, Second and Third Class. All who have qualified as Sharpshooters five years will be classed as Distinguished Riflemen. All who make a total of 105 at the combined ranges of 200, 300 and 500 yards on the State range will make one skirmish run of 20 shots, and all those making therein a grand total of 180 will be classed as Sharpshooters. All who make a total of 105 at the combined distances will be classed as Marksmen. All who make a total of 90 at the fixed distances will be classed as First Class. All who make a total of 60 at the fixed distances will be classed as Second Class. All others will be classed as Third Class.

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State decorations will be awarded to Distinguished Riflemen, Sharpshooters and Marksmen.

Qualifying scores for Marksmen and First Class may be made upon the home ranges of the various companies during any month of the practice season, but firing for the decoration of Sharpshooter will only take place on the State range during the annual encampment.

All officers and men making 120 or better at combined ranges of 200, 300 and 500 yards fire 3 trial and 10 record shots at 600, 800 and 1000 yards with U.S. magazine rifle. These scores are reported to general headquarters, but form no part of qualification for State decoration.

Each company fires three volleys at each of 600, 800 and 1000 ranges; all members in camp, except commissioned officers and field musicians, required to take part.

Record in individual practice for State decorations and volley firing are factors in fixing standard of companies in annual inspection.

MISSOURI

The requirements for rifle practice for qualifications of the National Guard are as follows: Riflemen, 15 shots, 3 scores of 5 shots each, 45 out of a possible 75, 100 yards, off hand standing, no elbow rest, A target; 200 yards, standing, with elbow rest, A target; 300 yards, kneeling or sitting, A target. Marksman, 15 shots, 3 scores of 5 shots each, 60 out of a possible 75, 200

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yards, standing with elbow rest, A target; 300 yards, kneeling or sitting, A target; 600 yards, prone, B target.

MONTANA

Follows U.S. Army Regulations.

NEBRASKA

Follows Small Arms Firing Regulations of the U.S. Army, with modifications. Targets A and B. Rounds of ammunition allowed to a man, 80, 40 of which must be consumed in record firing. The season for target practice is from May 15 to November 15; for record between September 1 and the close of the season.

Qualification.— Third Class, 2 scores of 5 shots each fired in succession, 18 out of a possible 25, at 200 yards; Second Class, 2 scores of 5 shots each fired in succession, 15 out of a possible 25 at 200 yards, 2 scores of 5 shots each fired in succession, 15 out of a possible 25 at 300 yards; First Class, 2 scores of 5 shots each fired in succession, 20 out a possible 25 at 200 yards, 2 scores of 5 shots each fired in succession, 20 out of a possible 25 at 300 yards; Marksman, 2 scores of 5 shots each fired in succession, 20 out of a possible 25 at 200 yards, 2 scores of 5 shots each fired in succession, 20 out of a possible 25 at 300 yards, and 2 scores of 5 shots each fired in succession, 20 out of a possible 25 at 500 yards; Sharpshooter, 2 scores of 5 shots each fired in succession, 21 out of a possible 25 at 200 yards, 2 scores of 5 shots each fired in succession, 21 out of a possible 25 at 300 yards, 2 scores of 5 shots each fired in succession, 22 out of a possible 25 at 500 yards, and 2 scores of 5 shots each fired in succession, 20 out of a possible 25 at 600 yards.

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Prizes or medals will be awarded as follows: To the best shot in each company, a bronze medal; to the best shot in each regiment, a silver medal; to the best shot in the brigade, a gold medal, to be awarded by the governor, and to become the individual property of the person holding the same for three successive years.

NEW HAMPSHIRE

Follows U.S. Army Regulations, with modifications. Practice season April 1 to November 30. Use U.S. targets drawn from Ordnance Department. Ammunition allowed to each man 100 rounds.

Qualification. — Third Class Marksman, 2 scores of 5 shots each, 15 out of a possible 25 at 200 yards, standing off hand; Second Class Marksman, 2 scores of 5 shots each, 18 out of a possible 25 at 200 yards, standing off hand, and 2 scores of 5 shots each, 15 out of a possible 25 at 300 yards, sitting or kneeling; First Class Marksman, 2 scores of 5 shots each, 20 out of a possible 25 at 200 yards, standing off hand, and 2 scores of 5 shots each, 20 out of a possible 25 at 300 yards, sitting or kneeling; Marksman, 2 scores of 5 shots each, 21 out of a possible 25 at 200 yards, standing off hand, 2 scores of 5 shots each, 21 out of a possible 25 at 300 yards, sitting or kneeling, and 2 scores of 5 shots each, 21 out of a possible 25 at 500 yards, prone; Sharpshooter, 2 scores of 5 shots each, 21 out of a possible 25 at 200 yards, standing off hand, 2 scores of 5 shots each, 21 out of a possible 25 at 300 yards, sitting or kneeling, 2 scores of 5 shots each, 23 out of a possible 25 at 500 yards, prone, and 2 scores of 5 shots each, 23 out of a possible 25 at 600 yards, prone. In qualifying all should begin with the lowest class and work upward.

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NEW JERSEY

Follows U.S. Army Regulations, with modifications.

Qualification. — At the close of the season the following classifications will be made. Third Class, all who fail to report on the range during the season; Second Class, those who report on the range for practice and shoot at 200 yards standing and 300 yards prone, and fail to score 30 out of a possible 70 at both ranges; First Class, such as score 30 or over up to 41 in the Second Class, at the same distances as in the Second Class (men in this class count 60); Marksmen are such as score 42 or upward out of a possible 70 at 200 and 300 yards. Marksmen scoring 56 out of a possible 70 are entitled to practice at 500 and 600 yards for qualification as Sharpshooters (men in this class count 100). Sharpshooters are such of the Marksmen who, having become qualified to practice at 500 and 600 yards, score 56 and upward at these ranges out of a possible 70. Sharpshooters scoring 63 out of a possible 70 are entitled to practice at 800 yards for qualification as Experts (sharpshooters count 200). Experts are such of the Sharpshooters who, having qualified to practice at 800 yards, make a score of 33 out of a possible 35 (experts count 300). At the first distance of either class (i.e. 200 or 500 yards) a score of 50 per cent of the possible is considered as qualifying the soldier to practice at the longer range. The number of qualifying shots at each distance will be 7.

NEW MEXICO

Follows U.S. Army Regulations.

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NEW YORK

Follows Regulations for Small Arms Practice N.G., N.Y. Ammunition allowed 50 rounds for each officer and enlisted man. Target A will be used for individual practice to the distance of 300 yards. Its dimensions are 4 feet wide and 6 feet high. The subdivisions of the target are in the form of an ellipse as follows: Bullseye 8x10 inches, center ring 24x30 inches, the inner ring 40x50 inches, the outer the remainder of the target. Target B will be used for volley firing and at distances greater than 300 yards. Its dimensions are 6 feet wide and 6 feet high. The subdivisions of the target are in the form of an ellipse, and as follows: Bullseye 18x24 inches, the center ring 36x46 inches, the inner ring 54x72 inches, the outer the remainder of the target. On ranges where 500 yards is the extreme distance that can be obtained, for the sharpshooter and expert class the B target reduced for 600, 700 and 800 yards shall be used. Two of each will be issued to each of such ranges, the dimensions and subdivisions being as follows: 600 yards, dimensions 57x57 inches, subdivisions, bullseye 14.25x19 inches, center ring 28.50x36 inches, inner ring 42.75x57 inches, outer remainder of the target; 700 yards, dimensions 47.57x47.57 inches, subdivisions, bullseye 11.90 x 15.86 inches, center ring 23.79x31.72 inches, inner ring 35.68x45.57 inches, outer remainder of the target; 800 yards, dimensions 40.50x40.50 inches, subdivisions, bullseye 10.13 x 13.50 inches, center ring 20.25x22.50 inches, inner ring 30.37x40.50 inches, outer remainder of

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the target. Practice for the year will close on October 1, and no score after that date will be allowed.

Qualification,— Marksman: the first stage of this practice will be on an A target for enlisted men armed with the rifle or carbine at 100 yards, standing, 5 consecutive shots; those who make upward of 15 will shoot in the second stage. Second stage will be on an A target, for enlisted men armed with rifle or carbine at 200 yards, kneeling, and at 300 yards prone 5 consecutive shots at each distance. Those failing to make 15 at the shorter distance will not be permitted to shoot at the longer distance. A score of 15 or more at each distance will constitute a Marksman and entitle the maker to the Marksman's decoration. Sharpshooter: This practice will be on a B target for officers and enlisted men of organizations armed with the rifle and carbine at 500 and 600 yards, prone, 5 consecutive shots at each distance, and will be restricted to those who have qualified in the Marksman class. Those failing to make 22, for those armed with a carbine 21, at 500 yards, will not be permitted to shoot at 600 yards. A score of 42, for those armed with the carbine of 41 or more, will constitute a Sharpshooter and entitle the maker to a Sharpshooter's decoration. Having qualified at 500 yards, shooting will be continued at 600 yards on the same day until qualifying. Expert: This practice for officers and enlisted men will be on B target at 700 and 800 yards, any position, 5 consecutive shots at each distance, and will be restricted to those who have qualified in Sharpshooter class. Those failing to make 20, or for those armed with the carbine 18, at 700 yards, will not be permitted to shoot at 800 yards. A score of

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40, or for those armed with carbine of 36 or more, will constitute an Expert and entitle the maker to the Expert's decoration, but in case of failure to qualify in this class in 3 scores at the longer distance, the score made at the shorter distance will be cancelled.

Distinguished Expert Class.— Practice in this class will be limited to those who have previously qualified as experts, and to whom U.S. magazine rifles or carbines, cal. .30, have been assigned. Distances 900 and 1000 yards, any position, five consecutive shots at each distance on a "C" target. Each competitor will be limited to four strings at each distance on the same day.

Those shooting with the rifle failing to make 20, and those with the carbine failing to make 18 at 900 yards, will not be permitted to shoot at 1000 yards.

A score of 40 or more for those armed with the rifle, and of 36 or more for those armed with the carbine, will constitute a Distinguished Expert qualification.

NORTH CAROLINA

Follows U.S. Army Regulations.

NORTH DAKOTA

Follows Small Arms Firing Regulations for the U.S. Army as modified. Season's practice, June 1 to October 30. Ammunition allowed, 75 rounds, 40 of which must be consumed in record firing.

Qualification.— Third Class: 2 scores of 5 shots each, 15 out of a possible 25 at 300 yards; Second Class: 2 scores of 5 shots each, 18 out of a possible 25 at 200 yards and 2 scores of 5 shots

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each, 20 out of a possible 25 at 300 yards; First Class: 2 scores of 5 shots each, 20 out of a possible 25 at 200 yards, and 2 scores of 5 shots each, 20 out of a possible 25 at 300 yards; Marksman: 2 scores of 5 shots each, 21 out of a possible 25 at 200 yards, 2 scores of 5 shots each, 21 out of a possible 25 at 300 yards, and 2 scores of 5 shots each, 21 out of a possible 25 at 500 yards; Sharpshooter: 2 scores of 5 shots each, 21 out of a possible 25 at 200 yards, 2 scores of 5 shots each, 21 out of a possible 25 at 300 yards, 2 scores of 5 shots each, 23 out of a possible 25 at 500 yards, and 2 scores of 5 shots each, 20 out of a possible 25 at 600 yards. The positions taken in firing at each range will conform to those laid down in the Firing Regulations.

OHIO

Follows Blount's Manual and uses A, B and C targets.

Qualification.— The Fourth Class will consist of all officers and men who do not appear on the range for practice; Third Class will consist of all who have practiced, but have failed to make a score of 13 at 200 yards, standing, on an A target; Second Class will consist of those who score 13 and upward in the practice with the preceding class, and fail to make a score of 13 at 300 yards, kneeling or sitting; First Class will consist of those who score 13 and upward in both the preceding classes; a score of 18 or upward in the Second and First Classes constitutes a Marksman; a score of 20 and upward in Second and First Classes constitutes a Sharpshooter.

OKLAHOMA

Follows U.S. Army Regulations.

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OREGON

Follows U.S. Army Regulations, using Blunt's Firing Regulations and Rice's Small Arms Practice.

PENNSYLVANIA

Follows Blunt's Firing Regulations and uses A and B targets (elliptical bullseye). Practice season, May 1 to October 31.

Qualification.— Third Class Marksman: Recruits who shall have enlisted since Nov. 30, 1901, and who succeed in making a total score at 100, 200 and 500 yards of 30 points, 5 consecutive shots at each range, shall be rated as Third Class Marksmen and be considered as having qualified for the season, but will be required to qualify as Second Class Marksmen every succeeding year that they remain in the service. Third Class Marksmen may enter for qualification in the Second Class. Second and First Class Marksmen: For qualifying as such 5 consecutive shots are allowed at each 200 and 500 yards. Re-entries are allowed until a score of 25 at the two ranges is made. When a score of over 25 and less than 40 is once made the marksman is qualified for the year. If it be under 40 he is a Second Class Marksman; if 40 or over he is a First Class Marksman. Sharpshooters: Any man who shall have qualified as a First Class Marksman in 1901 may enter for qualification as a Sharpshooter. For qualifying as a Sharpshooter 5 consecutive shots are allowed with U.S. Springfield rifle, cal. .45, at each 200, 500 and 600 yards. If a score of 67 or over is made at the

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three ranges, the marksman is qualified as a Sharpshooter. A First Class Marksman who fails on first trial to make a Sharpshooter's score will be allowed one re-entry, but no more. Any cavalryman may enter for qualification as a Sharpshooter with the carbine. A total score of 62 at the three ranges will qualify a cavalryman as a Sharpshooter.

RHODE ISLAND

The season for rifle practice begins July 12 or as soon thereafter as possible. The Quartermaster-General will issue such ammunition, powder, lead, tin, etc., as may be necessary. Men upon the range not restricted in the amount of ammunition allowed per day, excepting when the season's allowance has been expended. The allowance of State ammunition for each officer and enlisted man who has not qualified as Marksman, will be 120 rounds during the season. Men who have expended their allowance and have not qualified as Marksmen will be permitted to purchase State ammunition at the rate of 1½ cents per round, until such time as they shall qualify as Marksmen. Qualified Marksmen who have drawn their allowance and wish to try for the Sharpshooter's class, may purchase the necessary ammunition at the range at the rate of 2 cents per round. Qualified Sharpshooters wishing to try for the Expert class must furnish their own ammunition. Permission will be given the Assistant Inspector of Rifle Practice to use smokeless powder if required. Men who have qualified will not be permitted to practice on the range the balance of the season.

Qualifications.— The following rifle qualifications are hereby established: For First Class shot, 30 out of a possible 50 at 200

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and 500 yards; for Second Class shot, 26 out of a possible 50 at 200 and 500 yards; for Third Class shot, 24 out of a possible 50 at 200 yards; Marksman, 34 or more out of a possible 50 at 200 yards, 35 or more out of a possible 50 at 500 yards; Sharpshooter Class, 40 or more out of a possible 50 at 200 yards, 42 or more out of a possible 50 at 500 yards, 40 or more out of a possible 50 at 600 yards; Expert Class, in addition to being a qualified shooter, 46 or more out of a possible 50 at 500 yards, 45 or more out of a possible 50 at 600 yards, 46 or more out of a possible 50 at 800 yards. Qualifications in the Expert Class will be recognized by a suitable gold bar.

Scores for all of the above-named rifle qualifications shall consist of 5 consecutive shots with a possible total of 25 points. Marksmen armed with the carbine will use it at all ranges. At 200 yards no allowance will be made, but at 500, 600 and 800 yards the carbine will be allowed a handicap of one point in scores of 5 shots. Positions with both rifle and carbine at 200 yards, standing; at 500 and 600 yards, prone, head towards the target. At 800 yards the position for the carbine is prone, head towards the target; for the rifle, any position.

Enlisted men not qualifying into at least the Third Class the first year will be discharged for the best interest of the service. Officers and men who are unable to qualify as Third Class shots are of no value in the militia.

The following revolver qualifications are hereby established: Marksman, two scores of 24 at 50 yards; Sharpshooter, two scores of 26 at 50 yards, two scores of 27 at 75 yards. Scores

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will consist of 6 consecutive shots with a possible total of 30 points. All officers are entitled to qualify with the revolver. Suitable medals will be given for qualifications and bars for requalification. Officers must furnish their own ammunition. All qualifications will be made with the Colt's .38 caliber army revolver; minimum trigger pull, 4 pounds.

SOUTH DAKOTA

Follows U.S. Army Regulations.

SOUTH CAROLINA

Follows U.S. Army Regulations.

TENNESSEE

Follows U.S. Army Regulations.

TEXAS

Follows U.S. Army Regulations, without provisions for qualifications.

UTAH

Follows Small Arms Practice for National Guard by Col. James M. Rice. Practice season, July 1 to November 20. Uses targets of U.S. Army, elliptical bullseye, A, B and C.

Qualification.— The best score, whether the first or a subsequent one, made at each of the ranges, and the best skirmish score, will constitute the record score in general practice. Soldiers who have not qualified in a higher class will be classified in the Third

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Class. Those who have practiced on the range and failed to qualify in a higher class will be classed as Second Class; also those who have been thoroughly instructed in preliminary practice and have fired a score of five shots in gallery shooting with sight set for each of the ranges, 100, 200, 300, 500, 600 and 1000 yards, under proper instructions and in proper positions, including the prone as well as other positions, with sight set for 500 yards, will be classed as Second Class. Those who have practiced at 100, 200 and 300 yards, and have made an aggregate of 30 points, whether with carbine or rifle, out of the possible 75, will be classed in the First Class. Soldiers who make 45 points out of the possible 75 at the ranges 100, 200 and 300 yards, will be classed as Riflemen, but they may still practice at 500 yards and skirmish. First Class men may, in addition, practice at 500 yards and skirmish. Out of the possible 150 points, 80 made with the rifle or 75 with the carbine qualifies a Rifleman. A Rifleman may, in addition, practice at 600 yards. When, out of the possible 175 points, 125 are made with the rifle or 110 with the carbine, it qualifies a Marksman. A Marksman may, in addition, practice at 800 yards. When, out of the possible 200 points, 150 points are made with the rifle or 135 with the carbine, it qualifies an Expert. An Expert may, in addition, practice at 1000 yards. When, out of the possible 225 points, 180 are made with a rifle or 160 with the carbine, it qualifies a Sharpshooter. If an officer or soldier fails during the first season's practice to qualify as a Sharpshooter, he will repeat

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the same course in the next season and each succeeding season, until he qualifies as a Sharpshooter.

VERMONT

Follows Small Arms Firing Regulations of the U.S. Army, with modifications. Practice season from March 1 to November 30, inclusive. Amount of ammunition furnished each company during the season for outdoor practice, 6000 cartridges. Silhouette paper targets used for practice.

Qualification.— Officers and men who make a record of 50 out of a possible 75 at 200 yards range and the same at 200 yards gallery range, shall be rated as Marksmen of the Second Class; officers and men who have qualified as Second Class Marksmen are required where possible to fire at least 10 shots at each of the longer ranges, namely, 300, 500 and 600 yards; for Experts an aggregate of 90 must be made in 5 consecutive shots at each 200, 300, 500 and 600 yards; for Sharpshooters an aggregate of 80 must be made for 5 consecutive shots, each at the same ranges; Marksmen, an aggregate of 70 at the same ranges; First Class Marksmen, an aggregate of 60 at the same ranges; officers and men making an aggregate of 36 for three scores from 5 consecutive shots fired as follows: 5 shots at 100 yards off hand, 5 shots at 200 yards kneeling or sitting, 5 shots at 300 yards prone, shall be classed as Third Class Marksmen, but shall receive no decoration. The scores must be made on the lying figure target. Each man must make at least 12 at the lower range before advancing to the next higher range.

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Every company is required to qualify at least thirty men in the Third Class under penalty of possible disbandment, unless satisfactory reasons are shown why compliance with the above requirement was impossible.

A cup called the Centennial Trophy Cup, is offered for competition each year, the company making the highest average score to hold it until the following season as a special mark of honor. In awarding the cup at the close of the season the following method of computing the general average of each company will be followed: 1 point will be credited for each Third Class qualification made; 2 points for each Second Class; 3 points for each First Class; 4 points for each Marksman; 5 points for each Sharpshooter; and 6 points for each Expert. Requalifications to count the same as qualifications.

VIRGINIA

Follows U.S. Army Regulations.

WASHINGTON

Follows U.S. Army Regulations with modifications. Practice season, May 1 to September 30. Firing consists of 5 shots each at 200 and 300 yards and 10 shots at 500 in two scores and 5 shots at 600 yards.

Qualification.— For a Sharpshooter, an aggregate of 125 in regular practice at known distances, 200, 300, 500 and 600 yards, and in regular skirmish practice; Marksman, an aggregate of 90 in regular practice at 200, 300 and 500 yards, and as a skir-

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misher; First Class, an aggregate of 75; Second Class, an aggregate of 57; Third Class, all who have practiced and not made the aggregate qualifying them for the Second Class; Fourth Class will consist of all the remaining members of the company who are borne on its rolls at the close of the practice season.

To a Sharpshooter, when first qualifying, a Sharpshooter's cross and certificate will be issued; to a Marksman, for the first year, a pair of Marksman's buttons to be worn on the coat collar one inch from the opening in front, for the second year a pair of bronze with bars for the current and prior years, to which a bar will be added for each subsequent year of qualification. Sharpshooter's and Marksman's insignias will not be issued to the same man for the same year's firing.

WEST VIRGINIA

Follows U.S. Army Regulations, with modifications. Uses A and B targets. Practice season, May 1 to November 1.

Qualification.— Those who have completed practice at 100, 200, 300 and 500 yards, with an average score of 35, shall be designated Marksmen; those who have completed practice at 100, 200, 300 and 500 yards, with an average score of 30, shall be designated Riflemen; those who have completed practice at 100, 200 and 300 yards, with an average score of 30, shall be designated First Class men; those who have completed practice at 100 and 200 yards, with an average score of 30, shall be designated Second Class men.

Suitable badges will be issued for those men who attain the grade of First Class or higher.

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WISCONSIN

Follows U.S. Army Regulations, with modifications. Practice season, May 1 to October 10. No man without previous experience will be permitted to fire the service charge until he has been given instruction in aiming and sighting, has had practice in the gallery, and has fired at least 5 rounds at the 200 yard range. While firing for the first time he should be carefully coached by competent authority. In all range work the following conditions will be observed: No sighting shots will be permitted. The rectangular figure targets now in use in the U.S. Army will be used at all fixed distances, at 100, 200 and 300 yards target A (Prone Figure); at 500 and 600 yards target B (Kneeling Figure); at 800 yards target C (Standing Figure). The skirmish targets will be the same as those heretofore in use. The record practice will consist in firing 10 shots at each of the ranges, 200, 300, 500 and 600 yards.

If in practice any officer or soldier attains a percentage of 70 firing with the rifle, or 68 firing with the carbine, of the possible total score, he will be advanced to practice at 800 yards, firing at this range 10 shots. At 200 yards preliminary 3 shots will be fired kneeling or sitting, and 2 shots standing. Record, 5 shots kneeling or sitting and 5 shots standing. At 300 yards preliminary 3 shots will be fired prone, and 2 shots sitting. Record, 5 shots prone, and 5 shots kneeling or sitting. At 500 and 600 yards, prelim-

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inary and record, same as prescribed for 300 yards. At 800 yards 10 shots in preliminary and in record, prone position. No use of the gun sling will be made in any position or at any range. If loosened at all, it will only be sufficiently to permit the free passage of the hand between it and the stock.

Qualification.— A Sharpshooter is one who in firing with the rifle the prescribed number of shots in record practice at the rectangular targets at 200, 300, 500, 600 and 800 yards, together with his score in skirmishing firing, shall make 70 per cent of the possible aggregate score, or in firing with the carbine as above shall make 67 per cent of the possible aggregate score. A Marksman is one who in firing with the rifle the prescribed number of shots in record practice at rectangular targets at 200, 300, 500 and 600 yards, together with his score in skirmish firing, shall make 64 per cent of the possible aggregate score, or in firing with the carbine as above shall make 62 per cent of the possible score.

In skirmish firing the following rules will be enforced: For recruits on the first run the result of the firing will, at each halt, be signaled after the signal, "Cease Firing." The range and consequent adjustment of sights will be announced by the squad leaders or officers in charge, the number of shots, and whether by volley, slow or rapid fire, ordered for each halt. At 500 yards from the targets a volley will be fired; for this the men will take the kneeling position. At 400 yards one round per man will be fired; at 325 yards, 2 rounds; at 250 yards, 2 rounds, the men for all this firing taking the prone position. The commands for this firing will be those prescribed in the Drill Regulations for firing a limited number

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of rounds at will. At 200 yards the men will be directed to kneel and fire rapidly 3 cartridges. The retreat will then be ordered and conducted between each halt, first at double, then at quick time. Halts will be made at 300, 400 and 500 yards. At 300 yards, 2 cartridges and at 400 yards one cartridge will be fired, the men taking the prone position. At 500 yards a volley will be fired from the kneeling position. After this volley the squad will be assembled, the targets examined and the hits signaled.

WYOMING

Follows U.S. Army Regulations, with modifications. Uses targets A and B. Practice season June 1 to October 31; record practice between September 1 and close of season. Allowance of ammunition, 60 rounds to a man, 30 of which must be consumed in record firing.

Qualification.— Third Class: 2 scores, 5 shots each, 15 out of a possible 25 at 200 yards; Second Class: 2 scores, 5 shots each, 18 out of a possible 25 at 200 yards, 2 scores, 5 shots each, 15 out of a possible 25 at 300 yards; First Class: 2 scores, 5 shots each, 20 out of a possible 25 at 200 yards, 2 scores, 5 shots each, 20 out of a possible 25 at 300 yards; Marksman: 2 scores, 5 shots each, 21 out of a possible 25 at 200 yards, 2 scores, 5 shots each, 21 out of a possible 25 at 300 yards, 2 scores, 5 shots each, 21 out of a possible 25 at 500 yards; Sharpshooter: 2 scores.

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5 shots each, 21 out of a possible 25 at 200 yards, 2 scores, 5 shots each, 21 out of a possible 25 at 300 yards, 2 scores, 5 shots each, 23 out of a possible 25 at 500 yards.

Badges and buttons according to the pattern prescribed for the U.S. Army will be awarded to those who may qualify as Sharpshooters and Marksmen. A prize or medal will be awarded to the officer or member of the National Guard making highest record score.

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MILITARY RIFLE RANGE

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A MILITARY RIFLE RANGE

A perfect military rifle range is difficult to obtain. This was not an easy task when the U.S. Springfield rifle was the arm used by the regular troops and volunteers, but now that the U.S. Magazine rifle has superseded the former in the regular army and is being adopted by the volunteer militia the difficulty is enhanced, on account of the high power of the latter, its range and penetration being much greater than the U.S. Springfield rifle.

Military rifle ranges, especially those for volunteers, are generally adjacent to some city or town. They are sometimes regarded as unsafe, this fear often being well founded. Range practice with military rifles will be increased in this country from now on; modern rifles and ammunition require increased safeguards, consequently the question of providing a properly equipped military rifle range is each year becoming more important.

In the opinion of most rifle experts a perfect military rifle range would consist of a level plot of land 1200 yards long by 600 yards wide, with high wooded hills on three sides and the ocean behind the fourth side, the latter side being at the north, the firing points for rifle and revolver all being on one line across the range. This is a very important point, which has generally been disregarded in the past but should be borne in mind when laying out the range. No rifle range is safe with one firing point behind another.

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An illustration of a perfect military rifle range is herewith presented, prepared by the acknowledged expert engineer and rifleman, Captain W. F. Whittemore, of the New Jersey National Guard.

It would be quite difficult to find a tract of land as described situated at an accessible point, therefore some of the advantages must necessarily be dispensed with, but still an excellent rifle range may be secured. The tract of land 1200 by 600 yards might be changed to 1200 yards long from east to west by 600 yards at the firing point north to south and 50 yards north, making a plot of land nearly a right angled triangle in shape. The surrounding hills and woods should be secured if possible as they would serve as breaks for winds from the different directions; they would also prove something of an aid in stopping shots accidentally fired; but the hills and woods could be dispensed with and still an excellent range secured. The range might not be perfectly level, but it would certainly be a decided advantage to have it so. A tract of land containing gullies is very objectionable as with such conditions currents of air more readily form which have a great effect on the bullet's flight; when the land is level there is less trouble from unnoticed currents of air.

The ocean for a backing for a rifle range is admitted by experts to be unexcelled and the greatest safeguard. A mountain or high hill for a background is good, but the ocean is better. A hill or mountain is likely to be visited by

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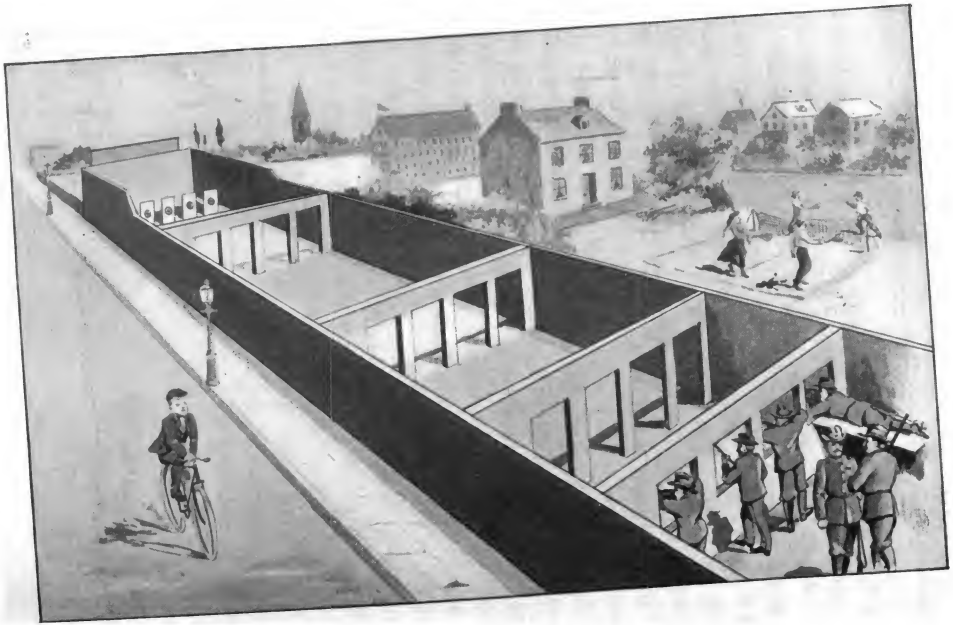

SAFETY RIFLE RANGE

as constructed in a town or city of Continental Europe.

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some unsuspicious person while rifle practice is in progress, who will be accidentally shot; bullets, too, with such background are likely at any time to strike rocks in the earth and ricochet wildly. With the ocean for a background a lookout can readily detect any approach to the danger line and signal a warning to cease firing. Shots striking the water are not likely to do any injury.

The advantage of having but one firing line is probably apparent to experienced riflemen. Most rifle ranges are laid out the reverse of what they should be. Usually there is a long line of 200 yard firing points in the rear of which come the 300 yard firing points, behind those the 500, the 600, 800, 900 and 1,000 yard firing points. By such an arrangement the marksmen at 200 yards are in danger from all wild shots or accidental discharges from all the firing points back of them and so the danger continues to each squad that have men behind them shooting at longer ranges. This danger is now generally recognized, and if a range is laid out with one firing point behind another, barriers or safeguards, consisting of two sets of boards some 20 inches or more apart, are erected and the interstices filled with rocks. These safeguards are usually erected about 20 feet from the firing point, the shot being fired through a port hole. By this arrangement a wild shot that would not hit the target is caught in the safeguard. These barriers, however, do not entirely insure safety from accidental shots.

The range of the New Jersey State Rifle Association, at Sea Girt, N.J., probably is the nearest perfect military rifle range in the United States. It has the firing points of revolver ranges, 200, 300, 500 and 600 yard rifle ranges all on one line; if it had 800,

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900 and 1,000 yard firing points on this one line it would be as near perfection as one is likely to find, as the range is level, free from rocks, and has the ocean for a backing to the targets.

The range of the Massachusetts Rifle Association, at Walnut Hill, Woburn, Mass., is an excellent example of a safe inland rifle range. This range when first built was necessarily laid out with one firing point behind another, but every known precaution of utility has been employed to make the range safe.

Great care should be exercised in measuring the different distances over which shooting is done. It is astonishing how many rifle ranges of the past have been found incorrectly measured. A point of vantage for a firing point, or advantageous place to plant the target has influenced many riflemen to disregard exactness in the distance fixed to shoot over. Every first class military range should be laid out by a competent engineer.

A modern rifle range should be built so as to expeditiously accommodate, as far as possible, those who wish to shoot, and at the ranges they wish to shoot. It should be so arranged that many third class targets (for 200 yard shooting) could quickly be made ready for use; or if many second class targets were desired for 500 and 600 yard shooting, the third class targets could be lowered out of sight and shot over to the second class targets. Again, if a number of first class targets were wanted, the targets in front of them could be lowered and shot over to the first class targets. Such an arrangement of targets could be secured by building the longer range butts higher than those of the short range. A sheltered subway running from the firing points to the different pits would prove very

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convenient and be an additional safeguard. By such an arrangement a range hand could quickly reach the pits or return therefrom, without the firing ceasing and without exposing himself to danger.

Reference has been made to placing the targets to the north; this is to avoid as much as possible the sun shining in the shooter's face, which is more likely to occur when the targets are placed to the east or west. With two persons shooting at a target, one in the morning with the sun behind him, the other in the afternoon with the sun in his face, the former would have a decided advantage.

A rifle pit may be defined as a trench for protecting a marker.

A butt is a raised mound in front of targets, a safeguard for the marker in the pit.

The rifle pit and butt are so closely connected they are treated together. In building a target pit it is usual to excavate earth to the depth of a few feet, utilizing the earth for the formation of the butt. Sometimes the natural lay of the land is a great aid in accomplishing this object, but usually, especially if the range is level, the excavation is necessary and the butt is constructed from the earth excavated, and often added to by additional earth. First, absolute certainty of complete protection against bullets reaching the marker must be secured. This means a butt of not less than 12 feet thick.

There are various ways of constructing butts. The easiest way is simply piling up earth, which naturally would take a sloping shape of about 35 degrees. This shape is not objectionable on the side facing the shooter, but is not desirable on the side nearest the marker, for the necessary width of the base of such a constructed butt places the pit too far back of the butt. The writer is an advo-

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cate of a deep pit and no higher butt than is necessary for safety. Assuming that the land selected for a range is level or nearly so, thick posts should be driven in front of the proposed pit. An excavation at least 6 feet deep would then be made and the earth piled in front of the rear posts. The butt, or mound, should be not less than 12 feet thick at the base and 9 feet thick at the top. This butt should be of solid earth and packed very solid.

The bottom of the pit should be so arranged that drainage can be secured. To accomplish this lay at the bottom of the pit small stones, over which place logs and over those planks. It is usually desirable to place the row of posts and boards at the back of the pits, to keep the earth from falling into the pit. The pits are generally so arranged that they may be covered at the top when not in use and the ends are closed by doors. The pits should be safe, clean and dry. This can be secured by following the foregoing directions, but if means permit, in place of the posts and boards masonry could be substituted, and the bottom of the pits bricked or asphalted, and gutters provided for drainage. This latter arrangement, however, would be much more expensive.

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TARGETS

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TARGETS

A great many materials for targets have been tried, but after exhaustive experiments nothing has been found so good as paper. Iron or any hard material for targets is undesirable, for flying lead from bullets striking targets of hard material make them a source of danger. Accidents have often occurred on iron targets caused by the bullet striking them, while the traps necessary to use with such targets were open. In rainy weather, too, the shape of the bulls-eye on an iron target changes, and therefore the target is not uniform. Once the iron target was almost wholly used, now it is nearly obsolete, and paper targets are almost universally used.

While paper is recognized as the best material for rifle targets, such targets at the time of writing are imperfect. Paper targets are usually mounted on cloth or pasteboard, and in their present condition they are spongy and elastic, consequently when a bullet strikes the target it passes through it leaving a hole often of irregular shape, which closes more or less. Sometimes a bullet hole of .45 caliber closes so as to show a hole about half that diameter. Around this bullet hole there is usually a darkened ring made by the bullet indicating the diameter of the original bullet holes, but many times this ring is not shown, or is but partly shown; again, one side of the bullet hole will be cut away clean while the other will push away the paper only. This condition of affairs has often raised doubts as to the count of the shots, even among expert markers. Where

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skilled marksmen shoot so nearly alike, as is the case at the present time, a fraction of an inch in the location of a shot hole often means a great deal; and, too, a point more or less is likely to mean a great deal. It remains for some one to discover a preparation whereby the faces of targets may be so treated that bullets passing through paper targets will leave a shot hole the diameter of the bullet, and retain the exact size and shape of the shot holes.

OPERATING TARGETS

The sash principle is very popular, and is regarded as the best. It is constructed similar to a window sash. A frame work is arranged into which the sash frame is set. The target is raised out of the pit, which exposes it to the marksman. He fires a shot, when the shot is marked. Targets are printed on stout paper, sometimes on white paper, again on light brown paper; the latter is usually preferred. But though the paper is tough, it would not long stand the wind and shots, especially the large first and second class targets, without a backing, so it will be found necessary to tack over the target frame coarse cloth, like gunny bag cloth, over that cotton cloth on which the paper target is pasted.

MARKING

In military rifle shooting it is customary to mark the shots with disks. The marker in the pit hears the spat of a shot on his target; from the pit he sees the shot hole; he takes a disk in hand and raising it out of the pit places it on the shot hole; the disk is so made that while it points out the location of the shot its outside

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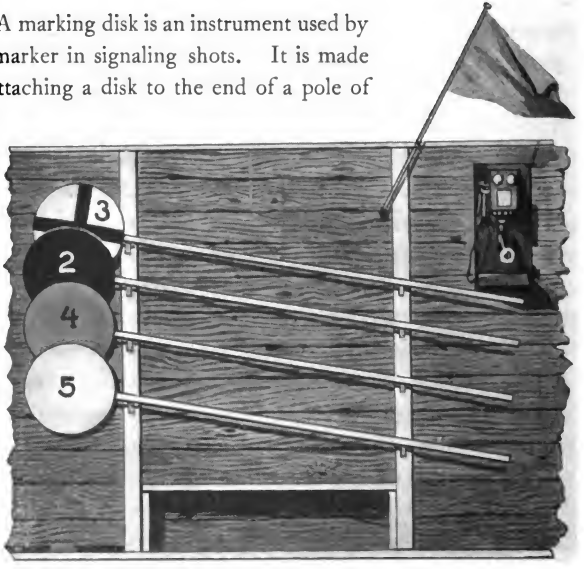
color toward the shooter also indicates the value of the shot. After marking this shot the target is pulled down into the pit, a paster is pasted over the shot hole and the target raised for the next shot.

MARKING DISK

A marking disk is an instrument used by the marker in signaling shots. It is made by attaching a disk to the end of a pole of about 8 feet in length. There is a disk for each count of a shot, the value of which is indicated by the colors. The scorer places the disk over the shot hole, which at the same time signals the value of the shot.



MARKING DISKS IN RIFLE PIT

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A white disk indicates a bullseye, count 5; a red disk indicates a center, count 4; a black and white disk indicates a magpie, count 3; a black disk indicates an outer, count 2.

The accompanying illustration shows the disks arranged orderly in the rifle pit ready for marking.

PASTER

A paster is a piece of paper, usually round, gummed on one side like a postage stamp. The marker moistens the gummed side and pastes it over the shot hole. Sometimes a long strip of gummed paper is used to paste over shot holes. The pasting system is considered the best. Its chief objection is the falling off of pasters in wet weather.

OTHER MODES OF OPERATING AND MARKING SHOTS

Sometimes, to facilitate quicker firing, a double target is used, by which arrangement a marksman fires a shot. The target he shoots on is lowered into the pit; the lowering of this target bringing into view the second target for the next marksman to fire upon. After long trials the single target is preferred by most military marksmen.

Another system of marking much in favor is as follows: Circular cardboard disks of about an inch in diameter are procured, one of black surface, the other of white. Through the center of these disks a wooden plug is placed. When a shot strikes the target it is lowered into the pit. If the shot be a bullseye the white cardboard disk with a plug is placed in the shot hole, and the target raised out

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of the pit. This enables the marksman and scorer at the firing point to spot the shot accurately by aid of the telescope. If the shot be outside the bullseye the black disk is employed instead of the white one. When the second shot is fired the target is lowered into the pit, the plug removed from the first shot hole, and that hole is covered with a gummed paster, the plug with disk is placed in the second shot hole and the target is raised for the next shot. By this system the first shot remains spotted until the second shot is fired.

The plug and disk system gives the marksman a more accurate location of his shot, but it is a slower system and the plugs sometimes fall out or are knocked out by another bullet. The plug is left in the shot hole until the next shot is fired, when it is removed, the shot hole pasted and the plug with disk placed in the next shot hole.

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MILITARY TARGETS

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MILITARY TARGETS

The National Rifle Association was formed Nov. 24, 1871, in the city of New York. Not until the formation of this organization was there any recognized military rifle target for various distances in the United States. This association adopted a target for shooting at distances from 100 to 1000 yds. The sizes of these targets were as follows: —

(*a*) Up to 300 yards, 6 ft.x2ft.; bullseye 8 inches square; center 2 feet square.

(*b*) Over 300 to 600 yards, 6 feet square; bullseye 2 feet square; center 4 feet square.

(*c*) Over 600 to 1000 yards, 6 ft.x12 ft.; bullseye 2 feet square; center 6 feet square,

(*d*) At 400 yards for volley firing, 6 ft.x12 ft.; bullseye 2 feet high and extending across the target; center, front above and below bullseye; outer, remainder of the target. In all cases bullseyes count 4, centers 3, outers 2.

These targets were in general use for military rifle shooting until 1875, when a new design for a military target was adopted by the National Rifle Association of America. They were as follows: —

Third Class Target, 4x6 feet, used in all distances up to and including 300 yards; bullseye, circular, 8 inches in diameter, count

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5; center, circular, 26 inches in diameter, count 4; inner, circular, 46 inches in diameter, count 3; outer, remainder of the target, count 2.

Second Class, 6x6 feet, all distances over 300 yards up to and including 600 yards; bullseye, circular, 22 inches in diameter, count 5; center, circular, 38 inches in diameter, count 4; inner, circular, 54 inches in diameter, count 3; outer, remainder of the target, count 2.

First Class, 6x12 feet, all distances over 600 yards; bullseye, circular, 36 inches in diameter, count 5; center, circular, 54 inches in diameter, count 4; inner, square, 6x6 feet, count 3; outer, remainder of the target, count 2.

These targets continued in use for many years, and are in use to some extent as military targets at the present time.

In 1883 Capt. Stanhope E. Blunt, of the U. S. Ordnance Department and Inspector of Small Arms Practice for the U.S. Army, presented his designs for a set of U.S. Army targets which are known by riflemen by several names, *i.e.*, U.S. Army targets, Blunt's targets and elliptical targets, the bullseyes, outer and inner circles being ellipses. A committee representing the National Rifle Association of America regarded this departure from the round bullseye and circles as unfortunate. They visited Washington and conferred with representatives of the Army, and suggested the retention of the old round bullseye and circle rings. This suggestion was not regarded favorably, and the U.S. Army targets gradually supplanted the Creedmoor target. The measurements of the U.S. Army targets are as follows: —

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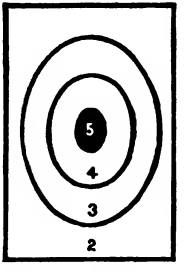
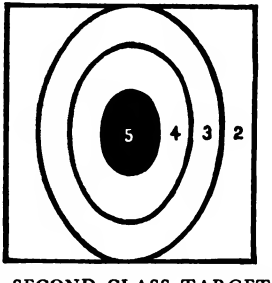


(*a*) THIRD CLASS TARGET*

Used chiefly for 200 yards shooting. Dimensions, 4x6 feet. Bullseye, ellipse, 8x10 inches; center, ellipse, 24x30 inches; inner, ellipse, 40x50 inches; outer, the remainder of the target.



(*b*) SECOND CLASS TARGET*

Used chiefly for 500 and 600 yards shooting. Dimensions, 6x6 feet. Bullseye, ellipse, 18x24 inches; center, ellipse, 36x48 inches; inner, ellipse, 54x72 inches; outer, remainder of the target.

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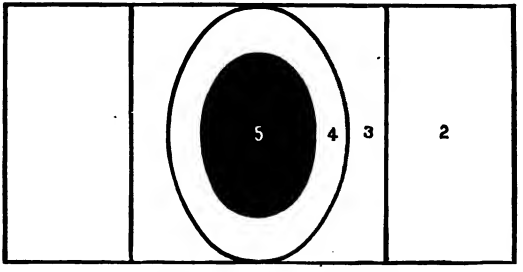
(*a*) Target, 4x6 feet; bullseye, an ellipse, 8x10; center, ellipse, 24x30; inner, ellipse, 40x50; outer, the remainder of the target.

(*b*) Target, 6 feet square; bullseye, an ellipse, 18x24; center, ellipse, 36x48; inner, ellipse, 54x72; outer, remainder of the target.

(*c*) Target, 6x12 feet; bullseye, ellipse, 32x45; center, ellipse, 51x72; inner, square, 6 feet; outer, remainder of the target.



(*c*) FIRST CLASS TARGET*

Used chiefly for 800, 900 and 1000 yards shooting. Dimensions, 6x12 feet. Bullseye, ellipse, 32x45 inches; center, ellipse, 51x72 inches; inner, square, 72x72 inches; outer, remainder of the target.

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*Small Arms Firing Regulations class these targets, (*a*) for 200 yards shooting; (*b*) 500 and 600 yards; (*c*) 800, 900 and 1000 yards. Outside the Army these targets are generally known as Third, Second and First Class.

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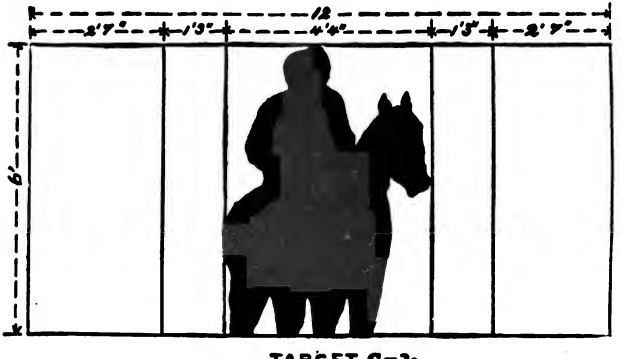
U.S. ARMY TARGETS

In 1898, with the view to securing uniformity in the course of instruction in small arms firing with the U.S. magazine rifle and carbine, the firing regulations for small arms for the U.S. Army were revised. The targets with elliptical bullseyes were discontinued and the figure or silhouette targets only retained. These targets are illustrated and dimensions are given on the following pages.



TARGET C–K.
U.S. ARMY TARGET

Target for 1000 yards.

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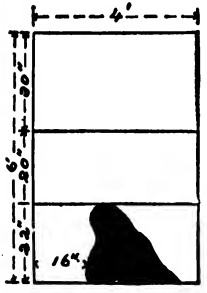
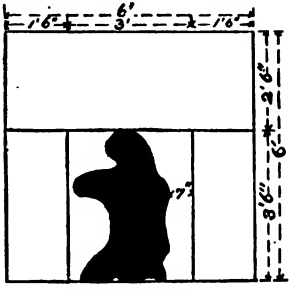
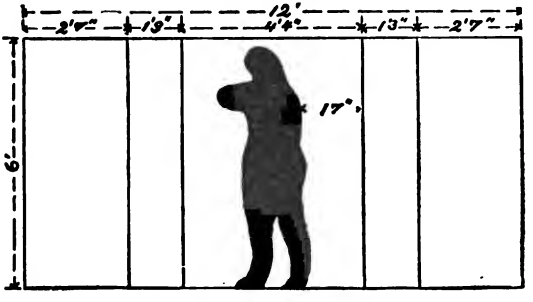


TARGET A.



TARGET B.



TARGET C - d.

U.S. ARMY TARGETS

Target A for 200 and 300 yards. Target B, mid range, for 500 and 600 yards. Target C, long range, for 800 yards.

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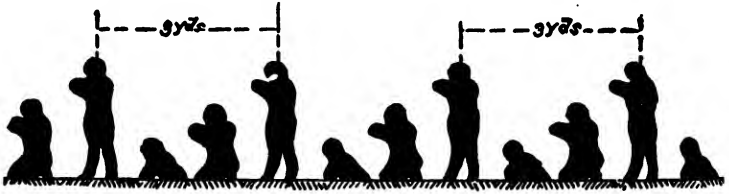
TARGET G.



TARGET H.

U.S. ARMY TARGETS

Target G is used for skirmish firing by squads.
Target H is used for company skirmish firing.

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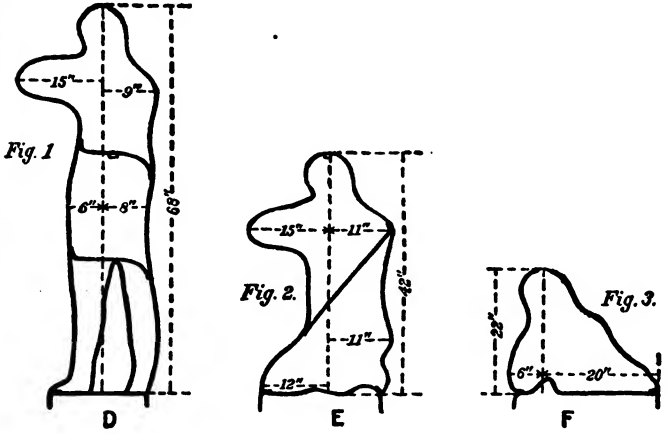

U.S. ARMY TARGETS

Skirmish Targets. — These targets, as provided for rifle practice in the U.S. Army, are constructed as follows: A steel skeleton frame of shape of each figure. These frames are erected and held in a vertical position by points at the bottom of each frame and by a sustaining rod, which is passed through a ring at the center of the standing figure and at the tops of the kneeling and lying figures. The frames are covered with cloth drawn tightly, over which black paper is pasted, making silhouette figures.

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N. R. A. TARGETS

In 1900 the National Rifle Association of America was reorganized, and in 1901 this association adopted a new set of targets for international matches, which are as follows: —

Third Class Target, 4x6 feet (3.65x5.48 metres), 200 and 300 yards (182.88 and 274.32 metres). Diameter, bullseye, 8 inches (om. 20 metres); center, 20 inches (om. 50 metres); inner, 32 inches (om. 81 metres); outer, remainder of the target.

Second Class Target, 6 feet square (5.48 metres), 500 and 600 yards (457.20 and 548.94 metres). Diameter, bullseye, 22 inches (om. 55 metres); center, 36 inches (om. 91 metres); inner, 48 inches (1.21 metres); outer, remainder of the target.

First Class Target, 12x6 feet (10.96x5.48 metres), 800, 900 and 1000 yards (731.52, 822.96 and 914.40 metres). Diameter, bullseye, 3 feet (om. 91 metres); center, 4½ feet (1.32 metres); inner, 6 feet (5.48 metres); outer, remainder of target.

These targets were adopted mainly for international competitions. Targets of these dimensions are almost universally used in military competitions abroad, and it was considered desirable that a uniform international target be adopted, in order that those preparing for international contests could practice upon the same target they would use in such a contest.

In 1901 the National Rifle Association of America decided to readopt the lines of the old target formerly known as the Creedmoor target, but now designated the National Rifle Association of America target. The measurements of these targets are as follows: —

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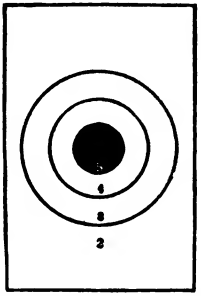
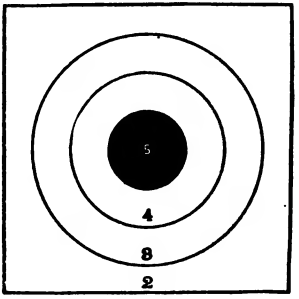


THIRD CLASS TARGET

Dimensions 4x6 feet. Bullseye, round, 8 inches; center circle, 26 inches; inner circle, 46 inches; outer, remainder of the target.



SECOND CLASS TARGET

Dimensions 6x6 feet. Bullseye, round, 22 inches; center circle, 38 inches; inner circle, 54 inches; outer, remainder of the target.

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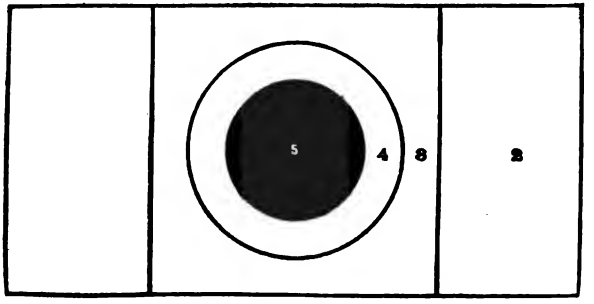

FIRST CLASS TARGET

Dimensions 6x12 feet. Bullseye, round, 36 inches; center circle, 54 inches; inner square, 6x6 feet; outer, remainder of the target.

Note. — The N.R.A. targets and the International targets in each class are similar in size; the bullseyes are also alike, but the center and inner circles on the second and third classes are different.

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MILITARY TROPHIES

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MILITARY TROPHIES

There are many military trophies in the United States, but most of them are local in their character, belonging either to States or regiments.

The most important international rifle trophy is known as the American Centennial Trophy, Palma. It is held by the Dominion of Canada at the present time, but is subject to challenge. Formerly it was contested for by civilian riflemen with match rifles, but as match rifles for long range shooting have become obsolete abroad, and nearly obsolete in the United States, it is probable that contests for this trophy in the future will be shot with military arms.

The American Centennial Trophy, Palma, was created in the year 1876, in the name of the United States of America, to be shot for in international competition by the riflemen of the world. This trophy was valued at $1500. It was to be contested for by teams of eight men from any country, with any rifle, at 800, 900 and 1000 yards, 30 shots per man at each distance. The match was arranged to last two days. It was first shot for in 1876, the Centennial year, by teams representing Scotland, Ireland, Australia, Canada and the United States of America. It was won by the American team with a score of 3,126 points. The second contest for the Palma occurred in 1877, between teams representing Great Britain and the United States of America respectively; it was again won by America, the score being 3,334 points.

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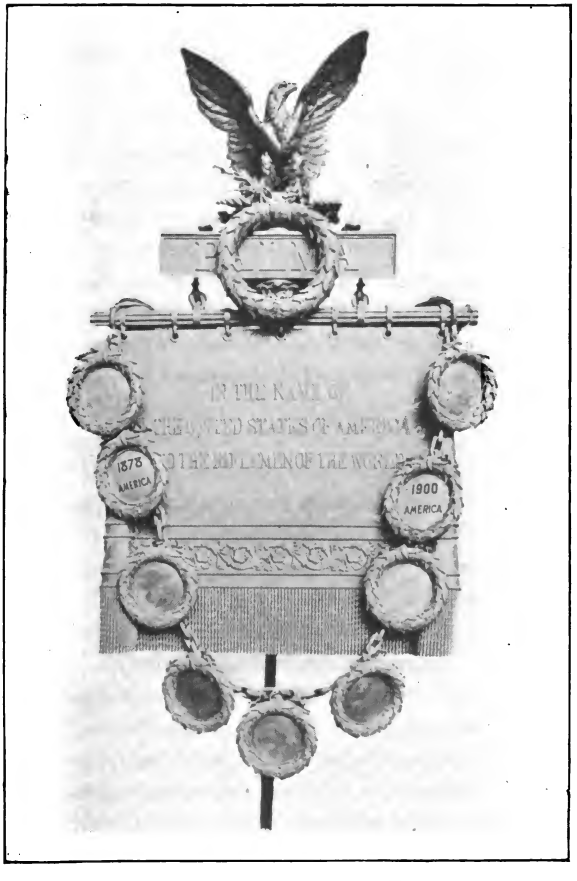

THE AMERICAN CENTENNIAL TROPHY, PALMA

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It was shot for by the American team only in 1878, there being no other contestants. The Score: 3,236 points, with 17 shots to fire.

After that interest in international competitions with the small bore match rifle waned, and the great Palma trophy, after resting a while in the National Rifle Association rooms, was stored. The rent for storage accumulated, and that account was adjusted by a few patriotic American riflemen, and the trophy was transferred to the Museum of Military Service at Governor's Island, New York Harbor, where it remained until the Spanish war began, when the Museum was taken by the U.S. Ordnance Department as a storehouse, and all relics were packed and stored in New York City. Later it was placed in the Military Museum, and in 1900 the surviving members of the National Rifle Association claimed it, and a contest for it was among the events at the Sea Girt meeting in that year.

No foreign team entered the competition, but an American team shot for the trophy alone. The score was 2,755. This score was shot with military rifles; all previous scores were shot with fine sighted match rifles.

In 1901 the Dominion of Canada contested against the United States for this trophy, winning it with a score of 1,522 points. The conditions of the match were, however, changed, each man firing 15 shots at each range in place of 30 shots as formerly, or 45 shots to a man, possible 225; team possible, 1,800, instead of 3,600. This match was also shot with military rifles, the Canadians using Lee-Enfield rifles, .303 caliber, the United States using U.S. magazine rifles, .30 caliber.

The conditions governing this match are as follows: —

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THE CENTENNIAL TROPHY MATCH, PALMA

For the Championship of the World. Open to Riflemen of all Countries.

CONDITIONS

Teams. — Each team shall consist of eight men. Members of the various teams participating must be native born citizens and residents of the countries they respectively represent, except in the case of teams representing a Provincial Territory of a government, in which case a residence in the Province will be sufficient, provided the member is a native born subject of the parent country.

Rifles. — The national military arm of the country the team represents. Minimum pull of trigger, 4½ pounds.

Distances. — 800, 900, and 1000 yards.

Number of Shots. — Fifteen at each range by each competitor.*

Position. — Any, without artificial rest.

Prize. — The American Centennial Trophy. Such trophy to be shot for in each subsequent year, upon the same terms, in the country of the team holding it, at such time and place as the national rifle shooting organization of the country may decide; also a bronze medal to each member of the winning team and a gold medal to the competitor making the highest aggregate score.

Sights, targets, marking, and scoring within the rules. In all particulars not herein named the Small Arms Firing Regulations of the U.S. Army will govern.

Possible score (former conditions), 3,600 points.

Won in 1876, U.S. America; score, 3,126 points.

* Conditions prior to 1901, thirty shots per man; team possible, 3,600.

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Won in 1877, U.S. America; score, 3,334 points.

Won in 1878, U.S. America; score, 3,236 points (with 17 shots to fire).

Won in 1900, U.S. America; score, 2,755 points.

Won in 1901, Dominion of Canada; score (new conditions), 1,522 points.

INTERSTATE MILITARY MATCH

The Soldier of Marathon is a national military trophy. It was originated by the State of New York, and each year a match known as the Interstate Match is shot, and the Soldier of Marathon is the trophy.

The conditions of this match are as follows: —

Open to one team of twelve from each State or Territory in the United States, consisting of the regularly organized and uniformed National Guard or Militia of such State or Territory, including the District of Columbia, chosen in such manner as shall be prescribed by the military authorities thereof. Each team must be provided with a certificate from the Adjutant-General of the State it represents, certifying that each of its number is a regular member of their uniformed militia in good standing, and was such on the first day of July of the year of the shoot. They shall appear in the uniform of their corps.

Distances. — 200 and 500 yards.

Positions. — At 200 yards, standing; at 500 yards, prone.

Rifles. — Rifles and ammunition within the rules.

Rounds. — 10 at each distance.

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SOLDIER OF MARATHON

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In all particulars not herein named the Small Arms Firing Regulations of the U.S. Army will govern.

Prize.— To the team making the highest aggregate score, a large bronze Soldier of Marathon presented by the Commander-in-Chief, on behalf of the State of New York, to be shot for annually, and to be held during the year by the Adjutant-General of the State whose team may win it. Value, $350. Also a medal to each member of the winning team. Possible score 1,200 points.

Won in 1875 by New York, score 864; 1876, Connecticut, 829; 1877, California, 995; 1878, New York, 974; 1879, New York, 1,010; 1880, New Jersey, 959; 1881, New York, 921; 1882, Pennsylvania, 989; 1883, Michigan, 1,013; 1884, Pennsylvania, 1,045; 1885, Pennsylvania, 1,014; 1886, Massachusetts, 1,024; 1887, Massachusetts, 1,014; 1888, Massachusetts, 1,047; 1889, Massachusetts, 1,045; 1890, New York, 986; 1891, New York, 1,026; 1892, Pennsylvania, 1,051; 1893, District of Columbia, 1,027; 1894, New Jersey, 1,044; 1895, Georgia, 1,043; 1896, Georgia, 1,048; 1897, Georgia, 1,107;* 1898, no meeting; 1899, District of Columbia, 1,006; 1900, District of Columbia, 1,049; 1901, New Jersey, 1,074.

* Made on silhouette target.

HILTON TROPHY MATCH

In 1877 Judge Henry Hilton of New York presented to the National Rifle Association of America an international trophy of great value, which is known as the Hilton Trophy. It is shot for annually under the following conditions: —

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THE HILTON TROPHY

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Open to teams of twelve men from the following : —

1. THE UNITED STATES OF AMERICA.

(*a*) The Army of the United States, one team from the troops stationed within each of the Military Departments.

(*b*) The United States Navy (one team).

(*c*) The United States Marine Corps.

(*d*) The National Guard or uniformed militia of the several States and Territories, including the District of Columbia (one from each State or Territory).

2. OTHER COUNTRIES.

England, Ireland, Scotland and each of the Provinces of Great Britain, and all other countries, one team each from the following : —

(*a*) The Regular Army.

(*b*) The Militia.

(*c*) The Volunteers.

(*d*) The Navy of any country.

Separate teams may be sent out when the organizations are separate.

The members of each team to be officers or enlisted men, and active members of the corps or organization which they represent, and to appear in the authorized uniform (full dress or fatigue) thereof.

They shall be selected in such manner as shall be prescribed by the military authorities of the country or State they represent, and shall, if required, be certified to by them as being their authorized representatives.

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Distances.— 200, 500, and 600 yards.

Rounds.— 7 at each distance.

Position.— Standing at 200 yards; at 500 and 600 yards, prone, with head toward target.

Rifles and ammunition within the rules. In all particulars not herein named, the Small Arms Firing Regulations of the U.S. Army will govern.

The trophy is shot for annually at Sea Girt. To be held during the year by the head of the corps or organization whose team may win it. Value, $3,000. Also a medal to each member of the winning team.

Possible score 1,260 points.

Won in 1878 by New York, score 1,044; 1879, New York, 1,043; 1880, Div. of Missouri, U.S.A., 1,023; 1881, New York, 911; 1882, Pennsylvania, 986; 1883, Michigan, 1,066; 1884, Div. of Atlantic, U.S.A., 1,018; 1885, Div. of Atlantic, U.S.A., 997; 1886, Massachusetts, 1,044; 1887, Massachusetts, 1,096; 1888, Massachusetts, 1,080; 1889, Massachusetts, 1,057; 1890, District of Columbia, 1,017; 1891, New York, 1,065; 1892, Pennsylvania, 1,056; 1893, District of Columbia, 1,058; 1894, Pennsylvania, 1,088; 1895, District of Columbia, 1,097; 1896, District of Columbia, 1,010; 1897, Georgia, 1,086;* 1898, no meeting; 1899, New Jersey, 1,089; 1900, New Jersey, 1,082 (shot with U.S. magazine rifle); 1901, District of Columbia, 1,098 (shot with U.S. magazine rifle).

* Made on silhouette target.

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THE WIMBLEDON CUP

The Wimbledon Cup was presented by the National Rifle Association of Great Britain to the National Rifle Association of America, to be competed for on conditions to be decided by the National Rifle Association of America, and to be held by the winner until the next annual meeting, when it was to be shot for under the same conditions. It is of silver, of beautiful design, and valued at $500.

The winner of the trophy is required to give bonds to the sum of $500 if he desires to hold the cup in person. If he does not care to supply these bonds, the cup is deposited with the Adjutant-General of the winner's State until the next meeting.

The conditions of the match call for 30 shots at 1000 yards, with any rifle within the rules. Cleaning is allowed. Match rifles are allowed and are used in this match, but military arms are now used by a majority of the contestants, a handicap of 18 points being given to those using military rifles with Government ammunition, and 6 points to those using special military rifles and any ammunition.

The Wimbledon Cup has been won by the following gentlemen: 1875, Major Fulton; 1876, I. L. Allen; 1877, Dudley Selph; 1878, Frank Hyde; 1879, C. H. Laird; 1880, W. M. Farrow; 1881, F. J. Rabbeth; 1882, W. Budworth; 1883, H. T. Rockwell; 1884, J. W. Todd; 1885, J. W. Todd; 1886, J. W. Todd; 1887, T. J. Dolan; 1888, W. M. Merrill; 1889, C. H. Gaus; 1890, C. H. Gaus; 1891, C. H. Gaus; 1892, C. H. Gaus; 1893, S. I. Scott; 1894, Peter Finnegan; 1895, S. I. Scott; 1896, Capt. Geo. T. Cann; 1897, Lieut. F. C. Wilson; 1898, no meeting; 1899, Lieut. F. C. Wilson; 1900,

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WIMBLEDON CUP

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W. deV. Foulke, score 140; 1901, Capt. W. B. Martin, 137, which includes 18 points handicap for shooting U.S. magazine rifle.

MILITARY CHAMPIONSHIP OF THE UNITED STATES

The military championship of the United States of America is shot for annually. The match is known as the President's Match. Open to all members of the Army, Navy, Marine Corps, Naval Reserve, and State Militia or National Guard. Competitors shoot with the rifle of the model adopted and issued by the State they represent (which must be a strictly military rifle, without special boring, chambering, sights or other improvements), or the U.S. Army or Navy magazine rifle.

CONDITIONS

200, 300, 500, 600, 800 and 1000 yards; 7 shots at each distance. The same rifle must be used at all distances.

The competitor having the highest total of the aggregate scores of all ranges will be declared the winner. One entry only allowed.

Prizes. —The Championship Medal (to become the property of winner), and the Military Championship of America for one year.

Possible score 210 points. *

Won in 1894 by Sergeant C. W. Dickey, D.C.N.G.; 1895, Sergeant W. A. Boyle, 12th Regiment, N.G.N.Y.; 1897, Private F. C. Battey, 1st Batt. Inf. Ga. Vols.; 1898, no contest; 1899, Lieut. F. C. Wilson, 1st Batt. Inf. Ga. Vols.; 1900, Capt. W. F. Whittemore, 4th N.J.N.G., score 262; 1901, Lieut. H. H. Leizear, 1st Regt., D.C.N.G., score, 137.

* Under former conditions a possible of 300.

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HINTS ON SHOOTING MILITARY RIFLES

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HINTS ON SHOOTING MILITARY RIFLES.

To instruct a novice in the art of military rifle shooting, it is customary first to devote some time to explaining the rifle. After a few brief remarks on what constitutes a rifle, the instructor should explain how the arm is operated. The old U.S. Springfield rifle being a breechloading hammer gun, and the U.S. magazine rifle being a bolt gun, the mechanism of course is somewhat different; the principles of rifle firing may be explained with one as well as with the other, but the manipulation of each arm is quite peculiar to itself.

After the instruction on how to operate the arm, the matter of sighting is explained. Usually a tripod is placed on the ground, a sand bag on the tripod, and the rifle on the sand bag. The instructor then explains to the recruit the service the sights render; he should explain that the open rear sight and the front sight should be aligned on the bullseye, or the object desired to hit. He should explain the difference between a fine sight, a medium sight, and a coarse sight when open sights are used; it should be explained that the medium sight guides the bullet higher than the fine sight, and that the coarse sight places the shot still higher. If the rear sight is a peep sight, like the rear Buffington sight on the U.S. Springfield rifle, the instructor should explain to the recruit that the front sight should be seen in the center of the aperture of the rear sight, and

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the front sight should be aligned on the bullseye, usually touching it at the lowest point of the bullseye.

When the matter of sighting is understood, it is well to proceed to an explanation of the positions in rifle firing, beginning with the standing position. We think the instructor should explain the difference between the hip rest position, the breast rest position, the body rest position, the strictly off hand position with arm extended slightly forward, and the off hand position with arm extended at full length. Formerly it was usual to give arbitrary decisions in reference to the manner of holding the rifle, but now, since it has been repeatedly shown that some men can shoot very accurately in one position and poorly in other positions, the choice of position is left to the preference of the novice, provided it be within the positions that have been found practicable.

The recruit should be made to understand that all these positions are allowable, and that to considerable extent the recruit's physique should govern choice of position. It is well to explain that a majority of United States military marksmen now use what is known as the breast rest or body rest position; that is, with the extended arm brought close to the body for support. It should further be explained that such a position is regarded as a very steady one, but if shooting is done at a moving object it is likely to be done better with the arm partially or fully extended.

Following the instructions on off hand positions should come explanations of the sitting position and the kneeling position, the prone position

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and the various back positions. A great deal of useful instruction might be imparted if the peculiar advantages derived from the different positions under specified conditions could be explained.

AIMING AND FIRING

This is a very important part of the soldier's training. It is assumed that he has an understanding of how to aim, and it should be explained to him that it is customary for a majority of riflemen to endeavor when aiming to sight at the bottom of the bullseye or just under it. Some marksmen claim that touching the bullseye with the front sight is not advantageous on account of the inability of the marksman to tell when the sight has moved into the bullseye; therefore it is regarded by a majority better to see a least bit of white between the top of the sight and the bottom of the bullseye. At the longer ranges some few marksmen sight at the top of the target, of course arranging the sight to correct the error of such sighting. Others have been known to aim to one side of the bullseye, shifting the sight to correct this manner of sighting, but it is safe to say that a majority of expert riflemen aim just under the bullseye.

KEEPING THE RIFLE PLUMB

It is desirable when aiming to keep the rifle plumb, and not cant it to one side or the other. If one forms the habit of canting the rifle the shots will go in the direction of the cant. Some military marksmen are so expert as to secure windage by this method when there is no windgauge on the rifle, but it is generally believed

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it is better to hold the rifle plumb and make the necessary allowance for wind by moving the windgauge or holding off, as it is termed, for windage. The marksman who holds his rifle irregularly, that is, at one time plumb and at another time canted, is likely to secure irregular shooting, unless he is skillful enough to judge accurately of the effects of the cant.

PRESSING THE TRIGGER

There is no more important point to be impressed upon the beginner than the proper way to press the trigger, assuring him that to pull the trigger improperly is fatal to good marksmanship. Some men will hold a rifle very steady, but when it comes to discharging the arm by pressing the trigger they do it improperly, and a bad shot follows. To considerable extent this is the result of nervousness. The marksman dreading the recoil flinches; he gives a yank, often sending the bullet wide of the target. If a marksman could train himself to aim as well as he could, and even if his arm be slightly unsteady press the trigger with deliberation and steadiness, he would find himself among the best shots. It is extremely difficult to acquire this habit of steadiness, but it goes a long way toward perfection in rifle shooting.

The recruit should be made to understand that the twist in the rifling has the effect of drifting the bullet somewhat in the direction of the twist.

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The effect of wind in rifle shooting is a point which should be explained graphically, and this explanation is better upon the range than elsewhere. Wind coming from dead ahead or in the face of the marksman should cause a shot to strike low; a rear wind would elevate the shot; a left wind would send the bullet to the right; while a wind from the right would cause the bullet to drift to the left.

The question of light is a very important one, and often baffles men of considerable experience. The elevations of a rifle are affected by changes of light, and the successful marksman should watch closely these changes, and note the results. If the weather be cloudy and the sun suddenly breaks forth, a different elevation to the rifle will be required; or, if it be bright, and the sky becomes overcast, another change must be made. The sun shining on the target with shooter in the shade requires a different elevation from the sun shining on the shooter and the target in the shade. The peculiarities of light must be closely studied by individuals. The longer the range the greater the effect of changes in light.

It is not possible to give positive directions which shall govern every shot a person makes shooting a rifle. There are recognized conditions which require certain changes, but there are departures from these rules, usually governed by weather conditions, which mark the individual marksman's skill, and that particular knowledge enables those posessing such skill to excel in rifle shooting.

Every military marksman should keep a record of his shooting. This is usually done in a small book, in which are diagrams of the targets on which he is shooting. He should enter the date and

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place of the shooting, then the distance, a diagram showing the target on which he is shooting, memoranda as to light and wind; any departure from the usual ammunition should be noted in the book.

When the shot is fired the marksman should note where the shot is spotted by the marker in the pit. If it is a bullseye he should make a dot in the bullseye in his score book and place the value of the shot in the space provided for it; some marksmen prefer to put a number on the spot the shot strikes to indicate the order of the shots. To illustrate: If the shot is a bullseye, a number is marked in the bullseye where the shot strikes, and the value of the shot in the place where it belongs on the score. Number 2 is a center, and number 2 is marked in the center spot on the diagram corresponding to the hit on the target, and a 4 recorded in the score, and so on to the end of the score. These records are very useful, for at some subsequent time when target shooting the marksman is able to refer to them and learn his elevations, the effect of wind and other points. This is very important at mid and long range shooting. These records should be carefully studied after the shooting, and be preserved for reference.

It is frequently found that the sights on a military rifle cannot be seen distinctly on account of the coloring being worn away, and the glint on the metal being quite confusing. This is overcome by smoking the sights, sometimes painting them, the former being the preferred method. To do this it is common to carry a piece of camphor which is ignited. This causes a smoke; the sights are held over the flames and thus blackened. If camphor is not procurable, a match will frequently blacken the sights sufficiently.

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CARE OF THE RIFLE

A successful military marksman is likely to be very careful of his rifle. While a military arm is made for rough service and will frequently stand a good many hard knocks, yet the careful rifleman always endeavors to avoid roughly handling his arm. Riflemen have been found who claim not to have cleaned their rifle during an entire season, and to secure good shooting from the arm. This mode of treatment of a rifle is not generally followed at the present time.

If such treatment of a rifle could be given to the old Springfield rifle and its good shooting qualities retained, it certainly is not the case with the U.S. magazine rifle, caliber .30.

Under any circumstances it is best after the firing is over to clean the rifle thoroughly, especial attention being given to the inside of the barrel. The barrel should be thoroughly wiped out with a moist cloth, followed by repeated wiping with a dry cloth until no trace of moisture or residuum remains. The barrel should then be lightly oiled; nothing is better than sperm oil. The gun grease supplied by the arms makers of the present time is good. Particular attention must be paid to the cleaning of the U.S. magazine rifle, caliber .30. The following order in relation to this matter was recently issued to the Volunteers of the State of New Jersey, the first State to issue the U.S. magazine rifle to its volunteers.

In order to keep the U.S. magazine rifle, caliber .30, in serviceable condition, the following regulations as to the cleaning and care of the same should be strictly observed:—

1. As the residuum of smokeless powder, if not completely removed, corrodes the barrel in a short time, great care is required

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in cleaning the arm after firing. The best results are obtained by cleaning the arm after firing each twenty shots.

2. To clean the barrel, insert in the chamber through the receiver a brass wire brush of .30 caliber, attached by a cord to a weight, allowing the weight to pass through the barrel first. At the rear end of the brass wire brush there should be a slot, in which should be placed a wet rag. Draw the brush and rag following briskly through the barrel. Repeat this twice. After doing this, clean the barrel carefully with rags saturated with soda and water, or if not obtainable, with water. Wipe thoroughly dry with clean rags. Remove the bolt and clean the chamber with soda and water from the rear in the same manner. Finally, oil both chamber and barrel with cosmoline oil, leaving a little coat. When a brass wire brush cannot be obtained, use the jointed rod, cleaning half the barrel from the muzzle and the remainder through the receiver; but use the brush if possible to obtain one.

3. If gas escapes at the base of the cartridge, it will probably enter the well of the bolt through the striker hole. In this case the bolt mechanism must be dismounted and the parts and well of the bolt thoroughly cleaned. Before assembling, the bolt mechanism, the firing pin, barrel, and undercuts of sleeve, body of striker, well of bolt, and undercut of bolt collars, should be lightly oiled.

4. Many parts can generally be cleaned with dry rags. All parts, after cleaning, should be wiped with an oiled rag. The best method of applying oil is to rub with a piece of cotton, upon which a few drops of oil have been placed, thereby avoiding the use of an

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unnecessary amount of oil. This method will, even in the absence of the oiler, serve for the cams of the cocking-piece, bolt, gate-lug, and carrier, and the bearing of the magazine spring on the gate hinge, all of which should be kept lubricated.

5. Any parts that may appear to move hard can generally be freed by the use of a little oil.

6. The stock and hand guard may be coated with raw linseed oil and polished by rubbing with the hand.

7. As soon as the firing is completed, attach the front sight protector at once, and when putting the arm away for the day bind the breech mechanism with the canvas cover.

8. When the arm is packed away for the winter, after cleaning as above directed, oil inside and out with cosmoline. Do not insert a plug of wood or a bit of rag in the muzzle, but tie over the muzzle a small piece of cloth or canvas.

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APPENDIX

THE EVOLUTION OF THE CARTRIDGE

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